DOCUMENT RESUME

ED 301 371 RC 016 791

AUTHOR John, DeWitt; And Others
TITLE A Brighter Future for Rural America? Strategies for Communities and States.
INSTITUTION National Governors' Association, Washington, DC. Center for Policy Research.
SPONS AGENCY Aspen Inst., Durham, NH. Rural Economic Policy Program.; Ford Foundation, New York, N.Y.
REPORT NO ISBN-1-55877-000-3
PUB DATE 88
NOTE 122p.
AVAILABLE FROM Publications Desk, National Governors' Association, 444 North Capitol Street, Washington, DC 20001 ($12.95).
PUB TYPE Reports - Research/Technical (143) -- Books (010)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS Community Development; *Developmental Programs; Economic Change; Economic Development; Economic Progress; *Economic Research; *Poverty Areas; Rural Areas; Rural Development; *Rural Economics; State Officials; Surveys
IDENTIFIERS *Farm Crisis

ABSTRACT

This book outlines the competitive challenge facing rural America and discusses signs of hope for the rural economy. It reports some "secrets of success" in 16 rural farm belt counties that have gained employment while most rural areas are losing jobs. It also describes new state initiatives to help rural communities and lists operating principles to guide state efforts. Chapter 1, "Signs of Gloom, Signs of Hope," reviews signs of rural economic distress and outlines the questions addressed by this study. Chapter 2, "Predicting Patterns of Growth in the Rural Farm Belt," discusses patterns of rural economic growth, including a model explaining patterns of rural econonic change. The chapter also discusses classifications of high-growth counties. Chapter 3, "Successful Strategies for Rural Economic Growth," explains the selection of high-growth communities for study and lists eight keys to their success. Chapter 4, "State Support for Rural Economic Development," includes the following sections: (1) Building Statewide Economic Development Strategies; (2) Targeting and Customizing Economic Development Initiatives; (3) Organizing to Address the Problems of Rural and Distressed Areas; and (4) Conclusions. Chapter 5, "Crafting State Rural Strategies," includes ideas for discussion and further research. There are three appendices, including: (1) a literature review on "Determinants of Economic Growth"; (2) a "Model for Predicting Employment Change in the Rural Farm Belt"; and (3) an explanation of the field research methods used in this study. A bibliography of 102 references is included. (TES)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED301371

A BRIGHTER FUTURE FOR RURAL AMERICA:

Strategies for Communities and States

RC 016791

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

GERRY FEINSTEIN

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

NATIONAL GOVERNORS' ASSOCIATION

The National Governors' Association represents the Governors of the fifty states, the commonwealths of Puerto Rico and the Northern Marianas Islands, and the territories of American Samoa, Guam, and the Virgin Islands. Its missions are to influence the development and implementation of national policy and to apply creative leadership to state problems.

The National Governors' Association Center for Policy Research is the research and development arm of NGA. The center is a vehicle for sharing knowledge about innovative state activities, exploring the impact of federal initiatives on state government, and providing technical assistance to states. The center works in a number of policy fields, including environment, health, training, education, and information management as well as economic development, trade, and agriculture.

About The Cover

The cover shows population density in the central Midwest, from Denver to eastern Iowa and from Rapid City to Wichita. One dot represents 1,000 people. Source: "1980 Population Distribution in the United States," prepared by the Geography Division, Bureau of the Census, with the assistance of the National Ocean Service, National Oceanic and Atmospheric Administration, U.S. Department of Commerce.

A BRIGHTER FUTURE FOR RURAL AMERICA?

Strategies for Communities and States

by

DeWitt John, Sandra S. Batie, and Kim Norris

National Governors' Association
Center for Policy Research

Cover Design: Marty Anderson

© 1988 by the National Governors' Association
444 North Capitol Street
Washington, D.C. 20001-1572

First edition. All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, without permission in writing from the publisher.

The responsibility for the accuracy of the analysis and for the judgments expressed lies with the authors; the report does not constitute policy positions of NGA or of individual Governors.

Printed in the United States of America.

Library of Congress Cataloging-in-Publication Data

John, DeWitt, 1942-
A brighter future for rural America?

Bibliography: p.
1. United States—Economic policy—1981-
2. Rural development—United States. 3. United States—Rural conditions. I. Batie, Sandra S. II. Norris, Kim, 1958- . III. National Governors' Association. Center for Policy Research. IV. Title.
HC106.8.J66 1988 338.973'009173'4 88-12604
ISBN 1-55877-000-3

Table of Contents

Acknowledgements v

Foreword ix

1 Signs of Gloom, Signs of Hope 1
Signs of Economic Distress 1
Questions Addresses by this Study 3

2 Predicting Patterns of Growth in the Rural Farm Belt 7
Previous Research on Patterns of Rural Economic Growth 9
A Model to Explain Patterns of Rural Economic Change 11
Classifying the High-Growth Counties 18

3 Successful Strategies for Rural Economic Growth 25
Selecting High-Growth Communities 25
Findings 26
Conclusions 50

4 State Support for Rural Economic Development 53
Introduction 53
Building Statewide Economic Development Strategies 54
Targeting and Customizing Economic Development Initiatives 58
Organizing to Address the Problems of Rural or Distressed Areas 66
Conclusions 70

5 Crafting State Rural Strategies 73
Ideas for Discussion/and Research 80
Conclusions 81

Appendices 85

Bibliography 105

Index 111

About the Authors 117

Acknowledgements

This study was made possible by a grant from the Rural Poverty and Resources Program of the Ford Foundation and the Rural Economic Policy Program of the Aspen Institute. The Aspen Institute also organized roundtables for its grantees, which gave us a chance to exchange views with other researchers, to hear about other research projects supported by the program, and to receive comments on our study design. Susan E. Sechler, director of the Aspen Institute's Rural Economic Policy Program, took a strong interest in our research and provided many useful comments as the work progressed. We also appreciate the thoughtful comments of Cynthia M. Duncan and Wendy L. Cohen of the Aspen Institute.

The Agriculture and Rural Economy Division of the Economic Research Service (ARED/ERS), U.S. Department of Agriculture, provided invaluable assistance. We are grateful to Kenneth L. Deavers and David L. Brown, the director and former associate director of ARED, who helped design the model described in chapter two and made useful suggestions on all aspects of the study; to John Hession, who assembled the data, made the computer runs, and helped interpret the results; and to Calvin Beale, who provided insightful background information on the high-growth counties. Thanks also are due to John E. Lee Jr., administrator of the Economic Research Service, for creating an environment that is supportive of collaborative research activity.

Our research also benefited from the opportunities provided at the National Governors' Association. Many of the ideas tested in our research were developed from interchange with state officials and other participants in committee meetings, hearings, and workshops sponsored by NGA. We are grateful to Joan Wills, director of the NGA Center for Policy Research; Barbara Fontana, director of the NGA Committee on Agriculture and Rural Development; and Mark Popovich of the Council of State Planning and Policy Agencies for reviewing drafts of this report. Thanks to NGA staff members Karen Glass, Gerry Feinstein, and Mark Miller for editing the manuscript and to Raquel Stanton for her error-free typing.

We are grateful for the help and interest of colleagues in states, other policy research organizations, and in the university community, including Steve Colby of the Colorado Department of Local Affairs; Jo Clarke and Ron Ross of the Western Governors' Association; Stan R. Johnson of the Center for Rural and Agricultural Development at Iowa State University; David Kraybill, Tom G. Johnson, and Brady J. Deaton of Virginia Tech; Sharon Lawrence of the National Conference of State Legislatures; Glen C. Pulver of the University of Wisconsin; Doug Henton of SRI International; and Stewart N. Smith of Tufts University.

During the field research, we met many vibrant and successful people. We appreciate their candor, their helpfulness, and their time. Although they are too numerous to be listed individually, we would like to acknowledge their assistance.

Dedicated to J.G.J. and R.E.B.

Foreword

All of America faces a tough competitive challenge in the global marketplace.

Rural areas have special difficulties and have suffered a severe economic shock in the mid-1980s.

Although the tide of economic change appears to be running against most rural communities, we cannot afford to write off rural America. A quarter of our population lives in rural America. Furthermore, rural and metro economies are tightly intertwined, in agriculture, many manufacturing industries, and in the service sector.

Nor do we need to abandon hope. Rural America is highly diverse. Many rural businesses and communities are doing well.

This book outlines the competitive challenge facing rural America and reports on signs of hope for the rural economy. It reports the "secrets of success" in sixteen rural counties in the Farm Belt which have gained employment at the same time that most rural areas are losing jobs. It also describes new state initiatives to help rural communities and lists six "operating principles" to guide state efforts.

The leadership for a brighter rural future must come from individual communities. But states and the federal government must help.

In the last decade, there has been a renaissance in state economic development policies. Many of these new ideas and new energies are being focused on rural areas.

We also need a new federal-state-local alliance for rural America. The responsibilities of the different levels of government are shifting to reflect a new role for states as well as new economic conditions.

This book, by the NGA Center for Policy Research, suggests some of the answers for rural America. It will be a valuable resource for everyone who is trying to build a brighter future for rural America.

Terry Branstad
Governor of Iowa

1

Signs of Gloom, Signs of Hope

SIGNS OF ECONOMIC DISTRESS

Many parts of America are prospering. Others, however, are not. In particular, many rural locations are experiencing economic distress.[1] The signs of gloom are numerous and varied:

People are leaving rural America. In the 1970s, for the first time in decades, rural America grew more rapidly than metro America. The flow of population from the countryside to metro areas has now resumed with a vengeance. Between 1985 and 1986, the estimated net migration from rural to metro America was about 500,000. The following year, the flow rose to over three-quarters of a million. This is a very high rate of rural-urban migration. In the 1950s from a larger population base, migration averaged 500,000 per year; and in the 1960s, migration averaged only 170,000 per year.[2]

Rural industries are weak. The agricultural sector and financial institutions that lend to farmers have gone through a severe financial crisis. Although farm income rose in 1987, export markets are still weak and many farmers rely on massive federal price supports. Rural manufacturing grew substantially in the 1960s and 1970s, mostly in firms providing low-skill, low-wage jobs.[3] In the 1980s, rural areas lost over 212,000 manufacturing jobs (see Table 1). There also have been employment cutbacks in the mining and energy industries, as the prices of many commodities fell in the period between 1984 and 1986. Unemployment in counties specializing in energy and mining rose from 6 percent to 8 percent in 1976-1981 to between 10 percent and 15 percent in 1982-1985.[4]

Rural jobs are scarce and rural incomes are growing slowly. Since 1979, the rate of job growth in rural America was only one-third the rate in metro areas—a 4 percent increase compared to a 13 percent increase, respectively. Unemployment rates reflect the same pattern. Between 1973 and 1979, adjusted unemployment rates in rural areas averaged only slightly higher (0.16) than the metro rate. Between 1980 and 1985, the gap was over ten times greater (1.8). Per capita income rose more rapidly in virtually all kinds of rural counties than in metro areas in the 1960s and 1970s.

TABLE 1. CHANGES IN MANUFACTURING EMPLOYMENT IN RURAL AND METRO AMERICA, 1960–1984

	Percent Change in Manufacturing Employment		
	1960–1970	*1969–1979*	*1979–1984*
Metro	4	1	−8.3
Rural	22	17.4	−4.7

SOURCE: U.S. Department of Agriculture, Economic Research Service, Agriculture and Rural Economy Division, *Rural Economic Development in the 1980s: Preparing for the Future*, 1987, pp. 3-2, 3-3, 3-18.

Rural incomes now are falling behind metro incomes. During the period 1979-1984, rural per capita income grew at one-third of the rate in metro areas.[5]

The causes of rural economic distress are imperfectly understood. To some extent, the problem is cyclical, and there are some signs of recovery. The price of farmland appears to have bottomed out. The weakness of the dollar in foreign exchange markets should help manufacturing. Rising commodity prices are causing a partial recovery of the mining and timber industries.

However, part of the rural problem is long term. Rural areas are disproportionately dependent on agriculture and manufacturing, sectors which have not gained employment for decades and which are not expected to gain many jobs in the future. Employment in agriculture has declined steadily throughout this century, because farm productivity has grown faster (1.8 percent) than the demand for farm products (0.8 percent). Some rural areas did grow by gaining a larger share of manufacturing jobs in the 1960s and 1970s. Nationally, however, employment in manufacturing has been stagnant for over twenty years, fluctuating between 18 million and 20 million.

A third cause of economic problems in rural America is emerging. Rural areas are ill-equipped to capture the kind of growth that will drive the American economy in the coming years.

The United States' economy is increasingly interdependent with the economy of other countries. To maintain this nation's historically high level of per capita income, the United States must be more productive than other countries. The keys to prosperity seem to include a highly skilled and adaptable workforce, a capacity to respond quickly to rapidly changing markets in this country and abroad, and concerted efforts at all levels of industry—from the shop floor to top management—and the research community to ensure technological progress in the factory.

Rural areas are at a disadvantage in adjusting to these new economic imperatives:

Education. By several measures, the rural labor force is less educated than the metro labor force. Based on 1980 data, about 59.5 percent of all non-metro residents over the age of twenty-five have completed high school, compared with 69.5 percent in metro areas. (There are, however, important regional differences. In the Northeast, the metro-rural differences are minimal whereas in the South, the figures are 50.4 percent of rural residents and 65.9 percent of metro residents.)[6] Rural areas also have fewer college graduates; 18 percent of metro residents over age twenty-five have graduated college, compared with 11.5 percent of non-metro residents. The movement of population between metro and rural drains rural areas of college-educated residents. The net migration from rural to urban areas was two and one-half times higher for college graduates in 1985-1986 than for high school graduates.[7]

High-growth industries. Rural areas generally are not benefiting from the rapid growth of the service sector. Service industries that cater to retirement and tourism communities are growing rapidly in many rural areas, but these industries often have low-wage jobs. The higher-skilled and better-paid service industries (e.g., business services, banking, real estate, transportation, and communications) have grown more slowly in rural areas in the 1980s.[8] In addition, venture capital firms are highly concentrated in a few metro areas. These metro centers do "export" capital, but most investments have been made in highly urbanized areas in a few states.[9] Most rural areas and rural states lack first-class research facilities, so rural locations win less than their share, on a per capita basis, of federal research and development (R & D) dollars.

High-skill industries. High-technology industries (e.g., electronics and computers and others with sophisticated products, high numbers of scientists and engineers, and large R&D expenditures) also are underrepresented in rural areas. Traditionally, rural manufacturing has been concentrated in resource-based industries, like food-, wood-, and energy-processing, and in "bottom-of-cycle" firms that produce older, more standardized products. Bottom-of-cycle firms have less need for close collaboration between technical workers and corporate finance and marketing staffs. These firms tend to hire less-skilled and lower-paid workers. One analyst found "top-of-cycle" industries accounted for 48.8 percent of manufacturing jobs in metro areas but only 28 percent in rural areas. The lack of top-of-cycle firms is especially pronounced in the rural West and South, although the number is increasing in both regions.[10]

QUESTIONS ADDRESSED BY THIS STUDY

These broad economic trends suggest that the economic future for rural America is gloomy. In the immediate future, rising commodity prices and the weaker dollar may give some relief to many rural areas. But over the next decade, it seems highly unlikely that rural areas will experience the

population and employment growth that took place in the 1970s. The mid-term prospect for many rural areas is for a continued erosion of the economic base.

There are, however, some encouraging signs. A number of communities, even in the most distressed parts of the Midwest, are gaining jobs and population. In the seven Farm Belt states, 10 percent of the rural counties gained jobs during the period 1979-1984 as fast as the average rural county in the region had done in the 1970s.

This report examines signs of hope in rural America and searches for ways states can contribute to rural economic prosperity. We ask three questions:

1. *Patterns of growth*: What kinds of rural communities are growing? Can one predict which communities will grow? To answer these questions, we reviewed the literature on rural development and constructed a statistical model to predict patterns of employment change in rural counties in seven Farm Belt states in 1979-1984. The literature review and the results of the model are explained in Chapter Two.

2. Characteristics of success: How do the "high-employment-growth" rural areas achieve growth? What kinds of jobs and businesses are they gaining? Is government helping? To answer the second set of questions, we studied sixteen rural counties in the Farm Belt which had experienced high rates of employment growth in the early 1980s. Our findings are set forth in Chapter Three.

3. *Opportunities for states and communities*: What are states doing to promote economic development in rural America? How can states support community efforts for economic diversification and growth? Can state initiatives have a real impact on the rural economy? To investigate the ways states can encourage rural economic development, we surveyed all fifty states to gather a list of the most promising initiatives. The results of our survey are shown in Chapter Four. Chapter Five proposes six principles that can guide future state initiatives.

CHAPTER ONE ENDNOTES

1. There are many definitions of "rural." In this paper, "rural" includes all areas that are not parts of metropolitan areas, as defined by the federal government. This includes 2,441 of the nation's 3,067 counties, and 27.7 percent of the nation's population.
2. Kenneth Deavers, U.S. Department of Agriculture, Economic Research Service, private communication. The population of rural America was about 62 million in 1950, 66 million in 1960, and 57 million in 1980.
3. U.S. Department of Agriculture, Economic Research Service, Agriculture and Rural Economy Division, *Rural Economic Development in the 1980s: Preparing for the Future* (Washington, D.C., 1987), p. 3-13.
4. *Ibid.*, p. 5-28.

5. Employment data are from *Rural Economic Development in the 1980s*, p. v. Unemployment rates are from p. 1-17. Unemployment rates are adjusted to include discouraged workers and half of the workers employed part-time for economic reasons. (See also Chapter Two, especially Table 2.)
6. David A. McGranahan, John C. Hession, Fred K. Hines, and Max F. Jordan, *Social and Economic Characteristics of the Population in Metro and Nonmetro Counties, 1970-80* (Washington, D.C.: U.S. Department of Agriculture, Economic Research Service, 1986), pp. 15-16, 53.
7. *Rural Economic Development in the 1980s*, pp. 7-5 to 7-7, 7-16.
8. *Ibid.*, p. 6-17.
9. Richard L. Florida and Martin Kenney, "Venture Capital, High Technology and Regional Development." Revised version of a paper presented at the annual meeting of the Regional Science Association, Ohio State University, Columbus, Ohio, November 1986.
10. *Rural Economic Development in the 1980s*, pp. 3-4, 3-25. "Top-of-cycle" industries are those with products in the early developmental stage. They typically require a labor force with a higher degree of technical skill, such as more engineers and highly trained technicians.

2

Predicting Patterns of Growth In the Rural Farm Belt

Within the broad pattern of rural economic decline, which was discussed in Chapter One, there are many variations. Even within relatively similar rural areas, these differences can be significant. Table 2 shows the employment experiences of rural counties in the seven Farm Belt states during the period 1979-1984. Although the average rural county in these states lost 2.1 percent of its wage and salary employment between 1979 and 1984, 200 counties did not lose jobs. Over 100 of these 548 rural counties posted employment gains of over 5 percent.

Variations in economic performance are important to state and local officials. The resources available to state and local governments are limited, and officials need to know where they can be spent most effectively. Specifically, they must know what causes jobs, income, and population to grow in specific locations and not in others.

This chapter presents a brief review of literature on the location of economic growth in rural areas. A full literature review is presented in Appendix A.

This chapter also discusses a model that was developed to predict patterns of economic growth at the county level in the rural Midwest in 1979-1984. The model also was used to prepare a list of rural counties that experienced higher rates of growth than might be expected on the basis of the variables in the model.

The literature indicates that it is very difficult to predict changes in the economic vitality of different rural communities. The authors' experience confirms this finding.

The finding suggests three possible conclusions. First, readily available secondary data cannot be used effectively to target rural development funds geographically to where growth is most likely to occur. Second, even if a community appears to face constraints to its development, it may still be able to achieve significant economic growth. Third, to understand the factors causing growth in rural communities, one must look deeper than secondary data.

TABLE 2. EMPLOYMENT CHANGE IN RURAL FARM BELT COUNTIES

State	*More Than 25% Gain*	*15 to 25%*	*5 to 15%*	*+5 to 0%*	*0 to −5%*	*−5 to −15%*	*−15 to −25%*	*More Than 25% Loss*
	Percent of all Counties Experiencing Change in Wage and Salary Employment, 1979–1984							
Iowa (88)*	0	1	0	6	14	54	13	0
Kansas (97)	2	3	17	24	27	22	2	0
Missouri (98)	3	7	18	23	19	22	3	3
Nebraska (88)	1	2	14	15	34	19	3	0
North Dakota (49)	3	0	4	4	14	17	6	1
Oklahoma (63)	1	5	25	12	9	9	2	0
South Dakota (65)	0	1	2	7	14	37	4	0
No. of Counties (548)	10	19	80	91	131	180	33	4

*NOTE: Numbers in parentheses represent the number of counties.

SOURCE: Special tabulations by the Economic Research Service, U.S. Department of Agriculture of 1979–1984, Bureau of Economic Analysis employment statistics, 1987.

PREVIOUS RESEARCH ON PATTERNS OF RURAL ECONOMIC GROWTH

Some communities lie in the path of economic development. For example, many rural areas lie on the fringe of growing metro locations. Others are near government installations such as universities and military bases, which are relatively immobile. And still others are fortunate to have outstanding natural amenities like lakes, streams, or mountains, which attract recreation industries and retirement-age populations.

In the 1980s, rural counties with a strong employment base in government agencies or with recreation/retirement communities have almost kept pace with metro areas in terms of changes in per capita income. Whereas, rural counties dependent on manufacturing, farming, mining, or trade have all fared worse than metro counties (see Table 3).

Despite the fact that most manufacturing- and trade-dependent rural counties have lost ground, others have kept pace. There has been extensive research on why some communities grow when others do not, but no well-developed, comprehensive explanation has emerged. In the words of Monroe Newman:

> . . . access or infrastructure or enterprise zones or venture capital alone are not the answer . . . . development is a complex web of the tangible and intangible . . . the range of events that impact on the fortunes of an area are so large that we should not be surprised by a statistical or even conceptual inability to isolate the impact of any set of public actions on . . . income, employment, or population change.[1]

The more comprehensive literature review presented in Appendix A suggests a wide range of possible explanations for the location of growth in rural areas. A 1980 literature review by Clark Edwards grouped the explanations into five broad categories:[2]

Increasing Resource Availability refers to providing more resources—infrastructure, financial capital, or technical assistance—as a key to rural development. The basic idea is that more—or cheaper—inputs will lead to more output. Thus, to make a region grow, one should provide it with more resources or with less expensive resources.

Advancing Technology refers to investing in research and development, developing new and improved products and services, or improving human resources through job training. Investments in better technology lead to increases in the productivity of labor and capital. Some investments improve productivity as well as increase the availability of a resource. For example, better schools and universities may both raise the general skill level of the workforce and also make new kinds of skills available.

Expanding Markets focuses on new sources of demand for the products of a region. The premise is that the economic base of a region depends on "export markets," where "exports" are those goods and services sold

TABLE 3. PER CAPITA INCOME CHANGE IN RURAL AND METRO AMERICA

	*Number of Counties**	*1984 Population (%)*	*Percent Changes in Per Capita Income*			
			1965–69	*1969–73*	*1973–79*	*1979–84*
Metropolitan	626	72.27	3.7	2.2	1.0	0.8
Nonmetropolitan	2,441	27.73	4.2	4.7	0.8	0.3
Government**	239	12.90	4.1	3.7	0.8	0.8
Retirement	222	11.33	4.3	4.0	1.7	0.7
Manufacturing	618	36.23	4.2	3.5	0.9	0.4
Trade	370	16.37	4.0	5.0	1.1	0.3
Mixed	128	2.94	4.0	5.0	0.4	0.1
Farm	602	11.47	4.3	8.7	−0.9	−0.1
Mining	176	6.07	4.2	5.4	2.6	−1.2
Other	86	2.70	3.6	5.6	1.6	−0.5

*NOTES: The per capita income data used to compute data used to compute growth rates were in 1967 dollars.

* *The categories used by Henry, Drabenstott, and Gibson are modifications of those developed by the Economic Research Service.

SOURCE: Mark Henry, Mark Drabenstott, and Lynn Gibson, "A Changing Rural America," *Economic Review*, July/August 1986, pp. 24–25, 30–31.

outside the boundaries of the region. Sometimes export markets are thought to be the prime determinant of the economic health of a region. Expanding markets can be accomplished by specializing and trading with other regions, increasing the exports from and reducing the imports into a region, or by stimulating the demand for various local business products and services from within and without a region. Many regions that are particularly dependent on natural resource-based industries—agriculture, forestry, or mining—have tended to rely on this method of achieving growth.

Conquering Geographic Space refers to the role spatial relationships play in regional growth. Location theory focuses on the role of the location of resources, markets, and transportation services in determining the location of economic activity and on "agglomeration economies," which are cost savings accrued from locating related businesses and residences close to one another and to their markets.

Building Institutions (e.g., organizations, markets, and laws) refers to the need to develop new institutions to encourage and sustain growth. Institutional building facilitates the other four bases of growth. For example, building new financial institutions might be one aspect of making more financial resources available to businesses located in rural areas. In addition, more effective local government or new generic "development" institutions, such as planning agencies, community development committees, or other community institutions, might help spur local growth.

These categories help to illustrate the range of possible rural development strategies.[3] Most state and local rural development policies address one or two of the five categories. But the categories are very broad. To design initiatives or target scarce resources to locations where the impact will be the greatest, public officials need narrower categories that can be clearly measured.

Several studies have tried to predict the location of growth on the basis of measurable indicators. The most successful studies—in terms of fitting a mathematical model to actual data—are static. That is, they explain the geographic distribution of economic activity at any given point in time. It is much more difficult to predict *changes* in employment. Some studies have achieved a good fit (i.e., a high R^2 value, indicating a high percentage of the variance is explained by the model) at the state level, often by using a very large number of variables. Only a few studies explain rural economic changes at the county level. The design and results of these studies are compared with our findings below.

A MODEL TO EXPLAIN PATTERNS OF RURAL ECONOMIC CHANGE

The use of the statistical model was relatively simple. The objective was to use existing data and easily understood concepts to predict the geo-

graphic distribution of economic growth in rural counties in seven Farm Belt states from 1979 to 1984. The model was used to test how effective these data and concepts were in explaining patterns of growth. Once the model had accounted for as much growth as possible, the model selected counties that grew faster than predicted. These counties were studied in more detail to determine other, less easily measured factors that appeared to be important causes of growth.[4]

Well known as the best single source of statistical information on rural America within the federal government, the Agriculture and Rural Economy Division in the Economic Research Service of the U.S. Department of Agriculture (ARED/ERS) helped design the model, obtained the data, run the model, and interpret the results. Some of the data are directly available from the census; other data are the results of special analyses by ARED/ERS.

Design of the Model

The model was designed to explain the geographic distribution of economic growth. The analysis was confined to a small group of Farm Belt states: Iowa, Kansas, Missouri, Nebraska, North Dakota, Oklahoma, and South Dakota. These states differ in many ways from the rural South, the Rockies, the Pacific Northwest, and even adjacent states on the high plains or in the more industrialized Midwest. By focusing on seven comparatively homogeneous states, the influence of regional differences could be reduced and the study could identify clearly those factors that are more strongly associated with employment growth at the sub-state level. The analysis included all 548 rural counties in the seven states, that is, all counties outside the metropolitan areas designated by the federal government.

The period 1979 to 1984 was selected because this was a time of economic decline for many rural areas. The years after 1984 were not analyzed because consistent data for these years were not available.[5]

To measure economic growth, the change in total wage and salary employment in a county, as determined by place of work rather than residence of worker, was used. This is a widely used measure, and it is probably a more direct measure of local economic activity than population change or income. However, it does not differentiate between high-paying and low-paying jobs and does not include farmers and other self-employed persons.

Variables to Predict Employment Growth

Many variables were tested for their ability to predict employment change. They are listed and defined in Appendix B, which also includes a table of descriptive statistics and a correlation matrix. The results are summarized in Table 4.

TABLE 4. PREDICTING EMPLOYMENT CHANGE: RESULTS OF A MODEL*

Measure of Employment Change	Change in wage and salary employment, 1979–1984
Areas Studied	Non-metropolitan counties in seven Farm Belt states: Iowa, Kansas, Missouri, Nebraska, North Dakota, Oklahoma, South Dakota
Statistically Significant Relationships	*State economy:* higher job growth associated with certain states and with a measure comparing state and national employment change
	Percentage commuters: higher job growth associated with higher percentage of county residents who commute to jobs outside the county
	Dependency ratio: higher job growth associated with larger portion of county population outside "working age" (ages 18 to 65)
	Past employment growth in the county: higher growth in 1979–1984 associated with higher growth in 1970–1980
Statistically Non-significant Relationships	Median family income
	Total county population
	Industrial mix: percentage of county population in manufacturing, farm-related industry, or energy and mining
	Presence of an interstate highway
	Adjacency to a metropolitan area
	Federal spending on development programs
	Location of a state university in the county
	Percentage of adults with some post-secondary education

*NOTE: For explanation of variables and complete statistical results, see Appendix B.

SOURCE: Results of computer runs performed for the National Governors' Association by the Economic Research Service, U.S. Department of Agriculture, 1987.

One group of variables consisted of commonly used measures to describe local economies:

- Median family income
- Total county population
- Industrial mix
  - —Percent of farm-related employment
  - —Percent of mining and energy employment
  - —Percent of manufacturing employment

None of these variables had a statistically significant relationship to employment change. The model did *not* find that the richer counties, defined in terms of family income, gained more jobs than the poorer counties in 1979-1984; that economic activity was concentrated in larger cities and towns within rural areas; or that the industrial mix of the local economy had a significant impact on the rate of employment change.

These results may appear somewhat surprising. *After the Factories* is a widely read study of employment change in rural counties in the South in 1977-1982, by Stuart Rosenfeld, Edward Bergman, and Sarah Rubin. They found growth in employment was "positively and strongly" associated with per capita income and percent of employment in services, and was negatively associated with percent of employment in manufacturing.[6] Indeed, several of the findings from the two studies were different.

The rural economy of the South is, of course, quite different from the rural economy of the Midwest. As *After the Factories* notes, the South has a large rural minority population with a high level of poverty and low level of educational attainment; southern rural counties with large minority populations were falling behind in 1977-1982.[7] The differences between the rural Farm Belt and the South demonstrate the diversity of rural America.

Another possible surprise is the lack of a significant relationship between the total population of the county and the rate of employment growth. Several observers have advocated targeting resources in regional growth centers or have commented on the trend toward consolidation of wholesale, retail, and professional services in larger "market towns" in the Farm Belt.[8] A trend toward regional consolidation did not appear in our research.

One reason may have been the choice of variables; data on the population of the largest town in each county were not available, so total county population, including all towns as well as other areas, was used. In many rural counties, however, there is only one town of any size, so the total population should be a good proxy for the size of the largest town. Perhaps the best interpretation is that the trend toward consolidation in "market towns" is a long-term trend that should not be expected to show up in a study covering only five years.

A second group of variables measured the accessibility of rural counties. Several studies, including *After the Factories*, found that a location on an interstate highway or adjacent to a metro center often is associated with more rapid employment growth, but that remote counties sometimes do well by attracting recreation and retirement growth.[9] Variables included:

- Presence of an interstate highway
- Adjacency to a metropolitan area
- Percentage of workers commuting to another county

It was found that neither location by an interstate nor adjacency was significantly related to employment growth. The percentage of workers commuting to other counties, however, was positively related to growth. Apparently, commuters returning home from metro areas spending some of their earnings were generating a significant increase in employment in their rural home counties. Perhaps adjacency by itself is less important than whether commuters from rural areas can reach employment centers within the metro area in a reasonable period of time. The significance of commuting patterns in explaining employment growth is consistent with the findings of other researchers (e.g., Mitchelson and Fisher).[10]

A third group of variables described the resources available to rural economies. The list is not comprehensive, but did include variables that have been widely discussed:

- Federal spending on development programs
- Human skills
  - —Location of a state university within the county
  - —Percentage of adults with some post-secondary education
  - —Dependency ratio

A great deal has been written about whether state and federal development spending affects the location of economic growth. For example, Martin and Graham found that Economic Development Administration (EDA) funds to counties led to significant improvements in personal income growth rates during the period of aid receipt.[11] Barrows and Bromley found EDA public works projects had greater job creation impacts in less populated areas than in urbanized areas.[12] On the other hand, Stutzer found that state-issued revenue bonds have had little or no impact on statewide employment; he suggested such funds might be better targeted to specific program areas like worker training.[13]

No significant relationship was found between federal spending on development programs and employment change. There are many possible explanations. The variable we selected did not differentiate between types of federal aid. It included both grants and loans in a variety of programs, including business assistance, infrastructure, housing, economic and community development, and general revenue sharing. Some programs may be better managed than others or some may address problems that are

more important impediments to growth. Or, effectiveness may depend on whether spending is targeted more tightly to communities that can use federal resources more effectively. In the field research, the impact of federal and state development programs was investigated in greater detail.

The dependency ratio (which measured the relative size of the population outside the prime working years) did have a significant relationship to employment change, and the direction of that relationship was perhaps surprising. It showed that the *smaller* the number of county residents of "working age" (ages eighteen to sixty-five), the *faster* the rate of employment growth. It is likely that this result reflects the more rapid growth of counties with large populations of retired people, who were included with youth and children as "dependent."

From the perspective of a rural community, not all retired people are "dependent." For example, when a retired person moves to the countryside to retire, he or she brings personal savings, Social Security benefits, and probably a pension. Attracting retired people creates an inflow of wealth into a rural community as does exporting more farm or manufacturing products. In retrospect, it would have been better to use a different definition of "dependency" in the model, perhaps counting only children, youth, and residents between the ages of eighteen and sixty-five who were not wage earners or self-employed.

Neither of the education variables was significantly related to employment change. This differs from the finding of *After the Factories*, which found that counties with fewer college graduates gained fewer jobs. It also differs from recent thinking about economic development, which holds that the skills of the workforce are of fundamental importance in maintaining competitiveness, and stresses the role of universities as development partners. For example, David Osborne's analysis of new state economic development initiatives notes that "good roads and airports are still important, but *intellectual* infrastructure is the key."[14]

There are several possible interpretations of this result. The difference between findings in this study and those in *After the Factories* may largely reflect regional differences. In the rural Midwest, the educational level of the population, as measured by years of school completed or spending on elementary and secondary education, is higher than in the rural South, especially in counties with persistent poverty.

Another possible interpretation is that although states and the nation will benefit from a better educated workforce and high-quality universities, individual rural counties may find it hard to attract these individuals. Rural counties with the most highly educated workers and strongest universities may simply lose the best workers and graduates if appropriate jobs are not available locally.

The shortcomings of the "human skills" variables used in the model are probably an even more important cause of the low correlation with employment change. These variables may not have measured the correct factors.

They did not measure the educational level of the typical worker who does not have post-secondary training; and, even more important, it did not measure the practical skills of such workers. Perhaps a better variable would have been scores on a standardized test of educational skills, but these data do not exist. With respect to universities, there is a similar problem. The variable measured presence of a state university rather than linkages between the university and the local business community.

The final set of variables in our model described the economic context facing rural counties:

- Past employment growth in each county, 1970-1980
- The state economy

Significant relationships were found here. Previous research has shown that there is a substantial "inertia" to economic growth in rural areas. Some studies suggest there is a threshold of development which, once passed, can spur further growth.[15]

The impact of the state economy on individual counties was also examined. The variable was employment change at the state level divided by employment change at the national level. States that grew more slowly than the nation had low values on this variable. The relationship between this variable and employment change at the county level was significant and positive. That is, in faster growing states, rural counties also tended to grow faster. Other researchers (e.g., Martin and Graham) have had similar findings.[16]

The Predictive Power of the Model

As noted earlier, it is harder to predict *change* in employment than to predict total employment at any given point in time. Several different model specifications were tried and attained R^2 values ranging from .17 to .42. That is, the models predicted between 17 percent and 42 percent of the variance in the change in employment.

The greatest explanatory power (i.e., an R^2 value of .42) was achieved by a model that included all of the variables discussed above plus the net migration to or from each county in 1980-1985. This specification was not used for selecting high-growth counties because the logic appears to be circular—one would expect migration to areas where employment is rising and away from areas where it is dropping.

For a model specification that included an "inertia" variable, change in total employment from 1970 to 1980, and dummy variables to represent the states, the adjusted R^2 value was 24 percent. Without the dummy variables for states, the R^2 value fell to 22 percent. Removing the "inertia" variable caused the R^2 value to fall to 17 percent.

Although researchers always hope for as good a fit as possible, these results are similar to those of other research studies. The findings of this

study confirm the views of Newman and many others about the complexity of the development process and the difficulty of predicting change.

CLASSIFYING THE HIGH-GROWTH COUNTIES

From the viewpoint of state and local leaders, the low R^2 value is encouraging. It suggests that a community can still hope to grow economically even if it is not adjacent to a metro area, lacks access to an interstate highway, has no local state university, and has only average levels of family income, college-educated workers, and federal development funding.

But how can growth be achieved? To answer this question, attention was focused on forty "high-growth" counties. The counties were not selected on the basis of raw data, but rather on the basis of their doing better than the model predicted. The counties are shown in Figure 1. Table 5 shows the actual and predicted levels of employment gain in each county.

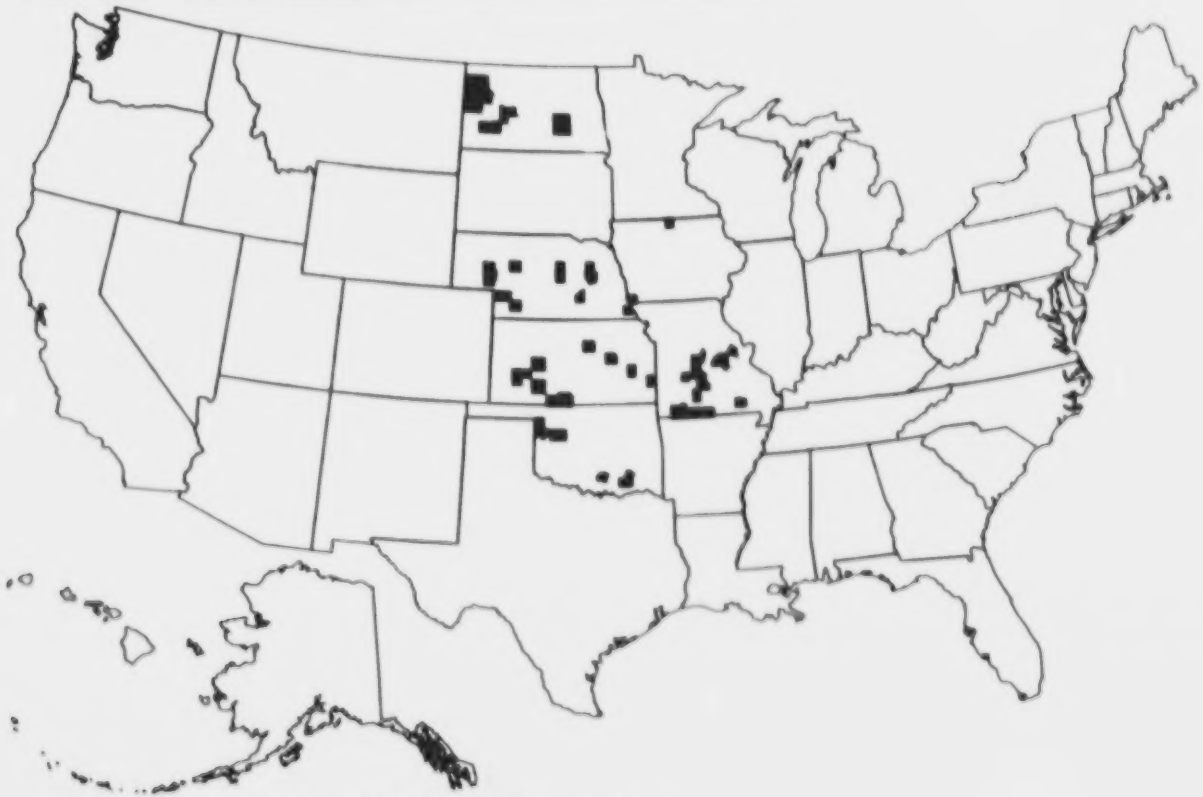
The forty counties averaged about 20 percent more jobs in 1979-1984. This compares very favorably with the average rural growth rate in the Farm Belt in the more prosperous 1970s, which equaled 25 percent over ten years.

The forty counties were selected using the model specification that included all of the variables listed above except the migration rate and the "inertia" variable. The R^2 value for this specification was .17. The inertia variable was excluded in order to explore how counties maintain a record of growth.

The forty counties fell into four groups.[17] Sixteen were "boom-bust" counties, where employment grew rapidly in 1979-1984 as a result of local construction projects or growth in oil, gas, and mining. In five counties, growth clearly was caused by overspill from adjacent metro areas. Eight were recreational centers, mostly in the southern Missouri Ozarks.

Only eight experienced sustained economic growth, not due to metro overspill or recreational development. If there are secrets of success in rural development, it is likely that they are held by communities that have experienced the kind of growth that occurred in these eight counties.

FIGURE 1. HIGH-GROWTH COUNTIES



SOURCE: Economic Research Service, U.S. Department of Agriculture, 1987.

TABLE 5. CONTINUED EMPLOYMENT GAINS IN HIGH-GROWTH COUNTIES, 1979–1984

County/State	*Actual Gain*	*Predicted Gain*	*Difference*
Diversified Growth			
Winnebago, Iowa	3.96	−8.4722	12.4283
Bourbon, Kansas	11.52	−1.6978	13.2183
Finney, Kansas	39.20	1.6348	37.5629
Ford, Kansas	18.64	1.8592	16.7855
Ottawa, Kansas	13.59	−1.2972	14.8836
Barry, Missouri	16.43	−1.3891	17.8211
Laclede, Missouri	20.06	−1.3574	21.4147
Nemaha, Nebraska	14.74	−1.7860	16.5309
"Boom-Bust" Counties (Oil and Gas)			
Barber, Kansas	16.48	−.0121	16.4938
Comanche, Kansas	9.58	−3.0144	12.5901
Ness, Kansas	18.41	−1.6565	20.0622
McKenzie, North Dakota	29.10	1.9462	27.1492
Mercer, North Dakota	63.53	2.8106	60.7207
Stark, North Dakota	11.82	−.3264	12.1434
Williams, North Dakota	27.57	3.0326	24.5342
Dewey, Oklahoma	18.63	2.5462	16.0855
Ellis, Oklahoma	41.16	4.1171	37.0431
Murray, Oklahoma	19.52	3.2739	16.2480
(Large-scale Construction)			
Coffey, Kansas	30.36	−3.8615	34.2168
Garden, Nebraska	26.35	−2.0031	28.3484
Garfield, Nebraska	5.70	−7.5783	13.2826
Perkins, Nebraska	10.32	−2.7392	13.0618
Valley, Nebraska	13.93	−4.6585	18.5883
Atoka, Oklahoma	22.32	8.1411	14.1818
Metro Overspill			
Hickory, Missouri	16.55	−.9368	17.4866
Moniteau, Missouri	17.68	1.2420	16.4347
Osage, Missouri	13.65	.4607	13.1930
Warren, Missouri	27.15	1.7260	25.4211
Webster, Missouri	18.00	−.2007	18.2046
Recreation/Retirement			
Camden, Missouri	40.40	2.9773	37.4213
Carter, Missouri	10.92	−.5703	11.4947
Gasconade, Missouri	16.47	.2811	16.1846
Morgan, Missouri	14.71	−.3514	15.0616

TABLE 5. CONTINUED

Ozark, Missouri	12.90	.6156	12.2822
Stone, Missouri	21.73	.4352	21.2987
Taney, Missouri	36.60	−.4096	37.0102
Morris, Kansas	11.31	−2.4096	13.7191
Change in Reporting			
Fremont, Iowa	18.00	−8.7499	26.7520
Extremely Small Population			
Hayes, Nebraska	23.53	3.4647	20.0647
Hooker, Nebraska	17.44	−1.7767	19.2144
Average	21.3069	−.1495	20.6834

SOURCE: Results of computer runs performed for the National Governors' Association by the Economic Research Service, U.S. Department of Agriculture, 1987.

CHAPTER TWO ENDNOTES

1. Monroe Newman, "Diversification: An Iconoclastic View," in *Coping with Change: Rural America in Transition*, by Senate Committee on Governmental Affairs (Washington, D.C.: U.S. Government Printing Office, 1987), pp. 84-91.
2. Clark Edwards, "The Bases for Regional Growth: A Review," in *A Survey of Agricultural Economic Literature*, vol. 3, Lee R. Martin, ed. (Minneapolis: University of Minnesota Press, 1981); and Clark Edwards, "The Political Economy of Rural Development: Theoretical Perspectives," in *American Journal of Agricultural Economics*, vol. 58, no. 5 (December 1986), pp. 914-21.
3. While the five bases for economic growth explain some of the economic growth differences among regions, the overall level of economic activity in rural regions in the United States has been strongly influenced by macroeconomic forces. Macroeconomic influences include changes in the strength of the American dollar and thus in trade patterns, and declining demands for mining, farming, and manufacturing products. Therefore, the five bases of growth identified by Edwards should explain why one region or community was successful while another was not, despite the fact that both were influenced by the same set of macroeconomic forces.
4. We might have constructed an elaborate model with dozens of variables, but chose not to do so. There were two reasons. First, our reading of the literature convinced us that investing more resources in building a model was not likely to raise its predictive powers substantially. It seemed wiser to invest our resources in field research in order to investigate factors like institution-building, the different roles of public officials and private businesspeople, and the ownership of local employers, which cannot be captured easily by statistical models.

   Second, we felt a complex model would have been less useful to state and local policymakers. We believed it would be more useful to test the predictive

powers of a simple model that state officials could easily replicate, using a manageable number of variables that are readily understood by non-economists.

5. There is a considerable lag between the collection of economic data at the county level, compilation at the state level, and then publication at the federal level. The process can take two to three years.
6. Stuart A. Rosenfeld, Edward M. Bergman, and Sarah Rubin, *After the Factories: Changing Employment Patterns in the Rural South*, (Research Triangle Park, N.C.: Southern Growth Policies Board, December 1985), pp. 38, 47. See also Randolph C. Martin and Robert E. Graham Jr., "The Impact of Economic Development Administration Programs: Some Empirical Evidence," *The Review of Economics and Statistics*, vol. 62, no. 1 (February 1980), pp. 52-62. This detailed study at the county level modeled changes in personal income, rather than employment growth. They analyzed 3,100 counties that had received Economic Development Assistance Grants and found that changes in personal income in these counties were significantly related to the source of income from the mix of agriculture, mining, service, or manufactuing industries.
7. Rosenfeld, Bergman, and Rubin, pp. 14, 38.
8. SRI International, *New Seeds for Nebraska: Strategies for Building the Next Economy* (Menlo Park, Calif., November 1987), pp. IV-19 to IV-21; and Kenneth E. Stone, "Retailing in Iowa, Past, Present, and Future," unpublished paper, Iowa State University, n.d.
9. *After the Factories* and Gerald Carlino and Edwin S. Mills, "The Determinants of County Growth," *Journal of Regional Science*, vol. 27, no. 1 (July-August 1987), pp. 39-54, found that counties on interstates grew more rapidly. However, *After the Factories* also found that "remote" counties (not on interstates and not adjacent to metro areas or to counties on interstates) also grew fairly well. Other researchers also have found that remoteness does not significantly influence the chances of community growth. See Ruth Young, "Industrial Location and Regional Change: The United States and New York State," *Regional Studies*, vol. 20, no. 4 (1986), pp. 341-69; W.K. Bryant, "Industrial-Urbanization and the Spatial Distribution of Income in Agriculture," in *Income Distribution Analysis*, edited by W.B. Back, D.M. Hoover, and J.A. Martin, North Carolina State University, Agricultural Policy Institute, API Series 23, pp. 139-52; and Frank M. Goode and J. Dean Jansma, "Planning for Rural Development: Indicators of Needs and Potentials in Pennsylvania," Pennsylvania State University, Department of Agricultural Economics and Rural Sociology, no. 116, April 1975.
10. Ronald J. Mitchelson and James S. Fisher, "Long Distance Commuting and Population Change in Georgia, 1960-80," *Growth and Change*, vol. 18, no. 1 (winter 1987), pp. 44-65.
11. Randolph C. Martin and Robert E. Graham Jr., "The Impact of Economic Development Administration Programs: Some Empirical Evidence," *The Review of Economics and Statistics*, vol. 62, no. 1 (February 1980), pp. 52-62.
12. Richard L. Barrows and Daniel W. Bromley, "Employment Impacts of the Economic Development Administration's Public Works Program," *American Journal of Agricultural Economics*, vol 57, no. 1 (February 1975), pp. 46-54.
13. Stutzer, Michael T., "The Statewide Economic Impact of Small Issue Indus-

trial Revenue Bonds," *Quarterly Review* (Federal Reserve Bank of Minneapolis), vol. 9, no. 2 (spring 1985), pp. 2-13.

14. David Osborne, "The New Role Models," *Inc. Magazine*, October 1987, p. 78.
15. Leonard F. Wheat, "The Determinants of 1963-77 Regional Manufacturing Growth: Why the South and West Grow," *Journal of Regional Science*, vol. 26, no. 4 (1986), pp. 635-59; and Carlino and Mills.
16. We also used dummy variables for each of the individual states in a separate specification of the model; several of these also were statistically significant. These results are more difficult to interpret. Counties might do better because the statewide economy was healthier or because state economic policies were more effective. Our field research was more effective than the model in probing the ways state policies affect economic growth at the county level.
17. These four groups account for all but three counties. In one of the three, the data was misleading. In two other counties in western Nebraska, the employment base was very small and we could not determine the reasons for the increase in 1979-1984.

3

Successful Strategies for Rural Economic Growth

SELECTING HIGH-GROWTH COMMUNITIES

Since economic trends in today's global economy seem to leave many rural areas at a disadvantage, it may be useful to look at communities that are experiencing unexpected economic growth. Why are they growing? Is it luck? Canny recruiting? The success of local entrepreneurs?

The second part of the research involved an intensive examination of high-growth rural counties in the Farm Belt. Eight counties were examined that were identified by the model as having been most successful in building a strong local economy in 1979-1984 "against the tide" (i.e., not because of an energy or construction boom, metro overspill, recreational/retirement features, or other advantages predicted by the model). In states where none of the forty high-growth counties identified by the model seemed promising for field research, another eight counties were added that had experienced strong employment growth in 1984-1986. State development officials helped identify these counties, and researchers verified that their rate of employment growth had been significantly above average. Investigators were not able to find "high-growth" counties in all states. For example, three counties were suggested by state officials, but it was determined that they did not have above-average employment gains. They are not included in the analysis.

Thus, sixteen counties qualified for intensive investigation. The counties are listed in Table 6 and shown in Figure 2.

Information about these counties was gathered through over 200 interviews with state economic development officials, university extension specialists, city and county elected officials, local economic development professionals, businesspeople and others in the community who had been active in local development efforts, and the owners or managers of the companies that had grown in these counties. Extensive telephone interviews were conducted in all sixteen counties. Personal interviews were conducted in twelve, including the eight that were identified by the statistical analysis. Each of the seven state capitols also was visited. The method for selecting the counties and conducting the field research are explained in detail in Appendix C.

TABLE 6. SIXTEEN HIGH-GROWTH COUNTIES INCLUDED IN FIELD RESEARCH

State	*County*	*Major Towns*
	Counties identified by statistical analysis	
Iowa	Winnebago	Forest City, Lake Mills
Kansas	Bourbon	Fort Scott
	Finney	Garden City
	Ford	Dodge City
	Ottawa	Minneapolis
Missouri	Barry	Monett, Cassville
	Laclede	Lebanon
Nebraska	Nemaha	Peru, Auburn
	Counties suggested by state departments of economic development	
Iowa	Clarke	Osceola
Missouri	Audrain	Mexico
	Crawford	Cuba
	Macon	Macon
	Perry	Perryville
North Dakota	Barnes	Valley City
	Richland	Wahpeton
	Rolette	Rolla, Belcourt

The field research focused on two issues:

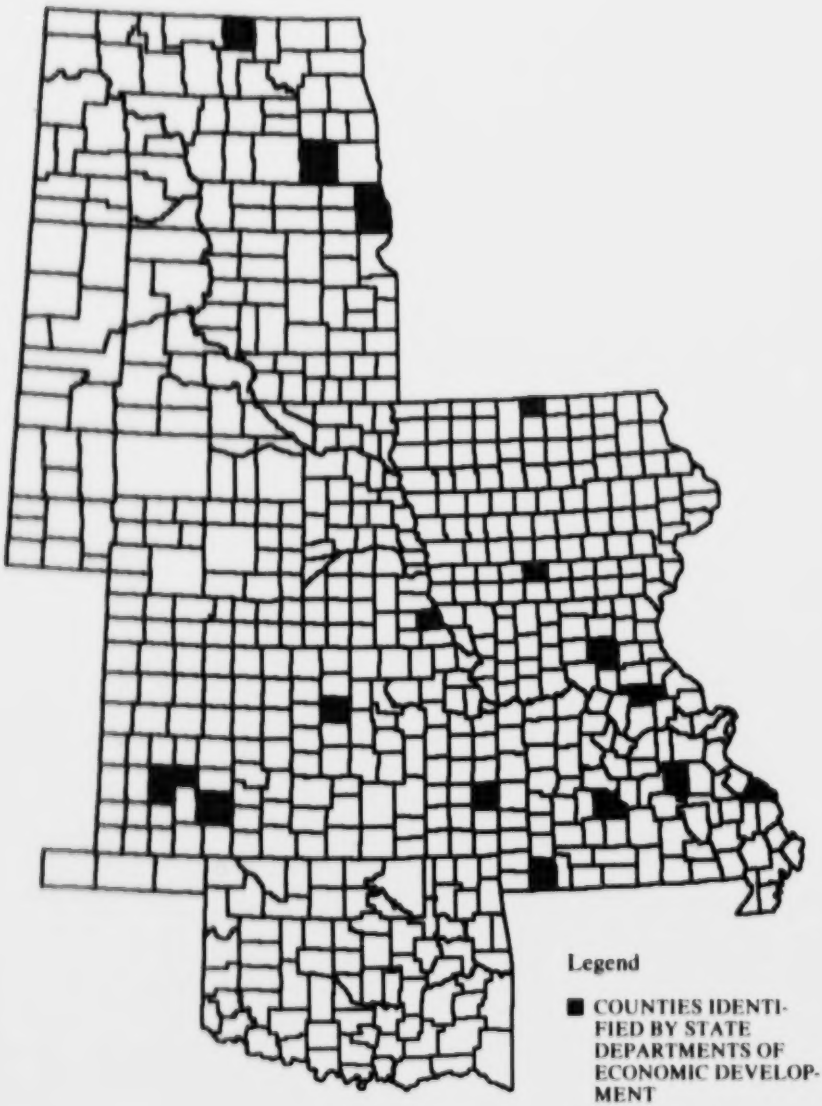
The Nature of Employment Growth: What kinds of firms are responsible for increases in the number of jobs in these counties? Are they large or small? Recruited or homegrown? Start-ups or expansions? In which industries?

The Role of Government: What contribution, if any, did federal, state, or local government make to the growth of these firms? What kind of assistance was provided to growing firms? What role does local leadership play? Does community leadership come from the private sector, government, or both?

FINDINGS

The findings from the field research are detailed below as eight "keys to success." The first three keys describe the size, ownership, industrial mix,

FIGURE 2. SIXTEEN HIGH-GROWTH COUNTIES INCLUDED IN FIELD RESEARCH



SOURCE: Economic Research Service, U.S. Department of Agriculture, 1987.

and flavor of the companies that appear to be powering economic growth in the sixteen communities. The other five describe how public officials and other leaders have contributed to the process of growth.

Together, these eight keys paint a picture that is much richer than most of the rhetoric about rural economic development. In addition to the branch plants, which have been the stock-in-trade of traditional rural development and the entrepreneurial new businesses currently in fashion, the research uncovered a blend of the two types. Also, although nationally the service sector continued to produce many more new jobs than manufacturing in 1979-1986, the sixteen communities did gain employment in traditional manufacturing industries, such as automotive products.

In most of the sixteen counties, businesses received a great deal of help as a result of sustained local economic development efforts. Typically led by businesspeople, such efforts had the support of local elected officials and frequently used resources provided by the state or federal government. When looked at with other findings that indicate the difficulty in predicting where growth will occur, one might conclude that many rural communities could grow economically if they would organize properly and devote enough energy to the process. Public-private partnerships and new alliances between different levels of government appear to be a necessary ingredient for economic growth to occur in rural areas. However, one must be careful about generalizing too much on the evidence from sixteen counties, even if these are "successful" counties. Other rural areas might use the same approach without as much success.

KEY #1: Recruitment and Entrepreneurship

Industrial recruitment and promoting entrepreneurship often are thought of as rival strategies for economic development. However, the high-growth communities have tried and are successfully using both strategies. Indeed, when one examines the record of these communities, the distinction between recruitment and entrepreneurship begins to blur.[1]

To explore the importance of recruitment and entrepreneurship, researchers identified 102 firms in the sixteen counties that have been experiencing significant growth since 1979. In addition, these companies were engaged in an activity that contributed to the economic base of the area (i.e., they produced a good or service that is sold to non-residents of the county). Ten of these firms are the classic target of industrial recruitment—branch plants of over 100 employees. (Two branch plants had over 1,000 employees; the others averaged 333 employees.) Only two firms were classified as rapidly growing new firms established by local entrepreneurs (see Table 7).

Why are there so few branch plant recruits? It is not that the high-growth counties are not recruiting. Most of the sixteen counties are experienced in industrial recruitment and have a track record of success. Of the 102

TABLE 7. SOURCES OF EMPLOYMENT GROWTH BY TYPE OF FIRM, 1979 TO 1986
(Estimated number of firms showing employment gains)

	Homegrown firms				*Recruited firms*			
	Start-up before 1979		*Start-up since 1979*		*Recruited before 1979*		*Recruited since 1979*	
	*Small**	*Large*	*Small*	*Large*	*Small*	*Large*	*Small*	*Large*
Original Eight Counties	20	3	1	0	18	3	5	8
Additional Eight Counties	15	1	1	0	7	2	16	2
Total Number of Firms	35	4	2	0	25	5	21	10
Grand Total	41				61			

*NOTE: Small is defined as fewer than 100 employees, large as 100 or more employees.
SOURCE: Field interviews in high-growth communities, 1987.

companies that grew rapidly in the early 1980s, thirty were recruits from the 1970s or earlier.

But the focus of economic development efforts in these communities is shifting. The counties continue to recruit aggressively, but most community leaders recognize the dangers of relying on large firms. Most would agree with the observation of a retired businessman in Lebanon, Missouri, who said "I would rather have a hundred small businesses employing ten people each in this town than have just a couple of big industries providing all the jobs. It's just like the saying about not putting all your eggs in one basket."

However, entrepreneurship, in the narrow sense of new start-ups by local residents, has not been a significant contributor to employment growth in the sixteen counties. Interviewers identified only two firms in the sixteen counties that are recent start-ups (since 1979) by local residents. Both were specialty sewing operations run by women.[2]

Two other kinds of firms are more numerous than either new start-ups by local residents or large branch plants. One is the existing business, long-established in the area, which has expanded significantly during the years of this study. Of the 102 growing firms in the sixteen counties, thirty-nine were existing, homegrown businesses that started before 1979. Most of these firms employ less than 100 people, but four have grown larger.

For example:

- Lebanon, Missouri traces the origins of its economic growth to the Detroit Tool and Die Company, a firm that was started by a local entrepreneur in the 1940s. Still locally owned and operated, the company now provides over 400 jobs.
- Midwestern Distribution in Fort Scott, Kansas began as a "mom and pop" operation in the 1960s. Over the years, this local trucking company has grown to over 300 employees.

Most business leaders in the high-growth towns recognize the importance of existing businesses. As one local leader put it, "the return from branch plant recruiting just isn't as good as it used to be. But existing businesses are a bird in the hand."

The second category of firm is a mixed group that blends elements of recruitment and entrepreneurship. One blend is referred to as the "recruited entrepreneur." In sixteen counties, researchers found twenty-one small firms that had been recruited since 1979. Fifteen were very small when recruited; the other six were small branch plants (see Table 8). Some of these firms were new but more often they were headed by an entrepreneur who was looking to relocate his fledgling operation.

Two other types of blends include the local entrepreneur who takes over a branch plant and builds it into a much larger operation and the small branch plant, which grows as its parent expands. In fact, the sixteen counties included twenty-five small firms and five large firms that had been recruited earlier and had grown in the 1979-1984 or 1979-1986 period.

The following illustrate these blends of entrepreneurship and recruitment:

- Monett, Missouri recruited a two-man, window-making operation from St. Louis in the late 1950s. Monett is still the home of Efco Corporation, now a major manufacturer of aluminum windows that employs nearly 500.

TABLE 8. TYPES OF RECRUITED FIRMS, 1979–1986

	Small Firms[a]	*Large Firms*
Independent Establishments	15[b]	2
Branch Plants	6	8
TOTAL	21	10

NOTES: [a]Small is defined as fewer than 100 employees, large as 100 or more employees.
[b]This category could be called "recruited entrepreneurs."
SOURCE: Field interviews in high-growth counties, 1987.

- Valley City, North Dakota also recruited an entrepreneur who had experience in starting up firms in the computer industry. The entrepreneur had some financial backing, a technology, and orders for his product. The town helped with additional financing, a plant site, and training for his workers.
- Forest City, Iowa and Minneapolis, Kansas attracted small branch plants of motor home manufacturers in the early 1960s. These plants were later purchased by local entrepreneurs who transformed them into prosperous, growing enterprises, providing several hundred to several thousand jobs.

In short, rather than focus simply on new firms or branch plants, the high-growth communities have encouraged—and have benefited from—the growth of businesses that were in many different stages of growth.

KEY #2: Manufacturing and Services

There is an ongoing debate about which industries offer the best prospects for increased employment in rural areas. The evidence from the high-growth counties suggests that traditional manufacturing may continue to be very important for some rural areas.

In rural areas, there is great interest in industries that are compatible with rural conditions, such as industries that rely on telecommunications and can locate wherever such facilities are available, food processing and other value-added industries, import replacement, home-based manufacturing, alternative crops such as vegetables and flowers, or low-pesticide crops.

Table 9 lists the industries that accounted for job growth in the high-growth counties in 1979-1986. The most striking thing about this list is how traditional it is. It demonstrates that during this period all sixteen counties relied heavily on "plain-vanilla" manufacturing (e.g., bending metal, making consumer products, or contributing to the ubiquitous motor vehicle industry). Food processing plants were found in seven counties. Of the high-tech companies, two were mainly precision machining (i.e., the production of telecommunications equipment and computer hard disks) and one was a small computer software company.

As for the service sector, export-oriented service industries, specifically insurance claims processing, trucking, telemarketing, and thoroughbred training, accounted for new jobs in only three counties. Although it was an important employer in several other counties, the service sector is dependent on the economic base established by manufacturers or the agriculture-related industry. Examples include health care, printing and publishing, construction, and warehousing.

No cases of home-based manufacturing or local import substitution were identified. Although it was found that most firms in the high-growth coun-

TABLE 9. SOURCES OF EMPLOYMENT GROWTH BY INDUSTRY GROUPINGS

Counties	*Other Manufacturing*	*Value-added Agricultural Industry*	*Services*	*High-Tech*
Winnebago Iowa	Motor homes Aluminum doors Fuel filters	Meat processing Gourmet soup		
Clarke Iowa	Wiring harnesses Auto appliances Electrical equipment Sporting goods Speciality sewing	Pork processing		
Laclede Missouri	Aluminum boats Clothing Furniture Electrical equipment Tool and die		Tourism Retirement	
Barry Missouri	Aluminum windows Aluminum extrusions Playground equipment Lawn/garden equipment	Poultry processing Dairy products	Retirement	

TABLE 9. SOURCES OF EMPLOYMENT GROWTH BY INDUSTRY GROUPINGS (cont'd)

	Fractional horsepower motors Shoes		
Macon Missouri	Small electric appliances Tool and die	Poultry processing Meat packing	Nursing homes
Crawford Missouri	Car door molding Brake shoes Electroplating Hardware store tools Prison furniture Nursing home furniture Shoes		Thoroughbred training
Audrain Missouri	Copper magnet wire Shipping containers Plastic food containers Tool and die		
Perry Missouri	Polystyrene packaging		
Ottawa Kansas	Shuttle buses Motor homes		

TABLE 9. SOURCES OF EMPLOYMENT GROWTH BY INDUSTRY GROUPINGS (cont'd)

Counties	*Other Manufacturing*	*Value-added Agricultural Industry*	*Services*	*High-Tech*
Bourbon Kansas	Aluminum products Machine belts Work clothes Stone products		Insurance Trucking Printing Tourism	Computer software
Finney Kansas	Fiberglass tanks Shipping containers Livestock trailers	Beef packing Feed and fertilizer	Construction Health care	
Ford Kansas	Farm equipment Livestock equipment Pallets and gates Power transmissions	Beef packing Feed and fertilizer	Tourism Health care Publishing Warehousing	
Nemaha Nebraska	Grounds maintenance equipment Kitchen cabinets Bronze bearings Specialty sewing		Telemarketing Trucking	
Barnes N. Dakota	Cement Physical therapy equipment Plastic bottles "Black boxes"	Agricultural chemicals		Computer hard disks

TABLE 9. SOURCES OF EMPLOYMENT GROWTH BY INDUSTRY GROUPINGS (cont'd)

Richland N. Dakota	Industrial canvas Farm equipment Sugar beet harvesters Tool and die Machining and metal fabricating	Sunflower seeds Malt barley processing Sugar and molasses	Telecommunications equipment
Rolette N. Dakota	Jewel bearings (for watches) Electronics assembly Army trailers		

SOURCE: Field interviews in high-growth counties, 1987.

ties produce for a regional or national market, very few export to overseas markets. Those that do are almost exclusively in the value-added agricultural industry, particularly meat processing and packaging.

Although the high-growth counties did prosper by adding jobs in traditional manufacturing, it does not necessarily follow that this could happen in all rural counties. In the immediate future, the weak dollar may lead to a boom in traditional manufacturing, including bottom-of-cycle and natural resource-based industries located in rural areas.

But over the long run, most economists predict no growth in total national manufacturing employment. Nationally, virtually all of the employment growth in the last two decades was in the service sector or, until the 1980s, in government. Employment in the manufacturing sector has been stagnant, rising and falling with the business cycle but staying close to $20 million nationwide.

From a national perspective, the service sector and high-tech industries are growing rapidly and appear to be good prospects for rural areas. In the 1980s, however, rural areas lagged behind metro centers in the creation of new service sector jobs.[3] And high-tech firms seem to cluster in metro centers.[4]

Rural areas that can become recreation and retirement centers may be able to gain jobs in the growing service sector. However, the sixteen high-growth counties included only a few examples of growth driven by expansion in the service sector.

This analysis suggests that from a national perspective, neither services nor manufacturing is a particularly good long-term prospect for widespread employment growth in rural areas, except for recreation/retirement communities. However, from the viewpoint of an individual community, it would be unwise to rule out traditional manufacturing industries in favor of options like value-added manufacturing, back-office data processing, telemarketing, or other promising new industries.

KEY #3: Progressive Firms

Although only a handful of companies make high-tech products in the high-growth counties, this does not mean that high-tech or state-of-the-art techniques are alien to firms in these counties. On the contrary, the firms contributing to growth in these counties generally are very progressive about implementing new production techniques, developing new products, and pursuing new markets. Most owners or managers of these companies demonstrated flexibility, imagination, and drive. For example:

- In Minneapolis, Kansas, a motor home manufacturer survived the industry washout of the late 1970s by converting to the production of shuttle buses, tapping into a variety of markets including airports, retirement communities, college campuses, and ski resorts.

- The Wahpeton Canvas Company in North Dakota began as a shoe repair service in the 1950s. Since then, the firm has grown into a manufacturer of industrial canvas, employing more than 200.
- Auburn Consolidated Industries in Auburn, Nebraska began to diversify its product line out of agricultural machinery in 1979. Today it is prospering with a line of grounds maintenance equipment.

KEY #4: Sustained Local Economic Development Activities

When one examines the factors that contributed to the growth of successful companies in these areas, the evidence is striking. In twelve of the sixteen counties, sustained efforts by local business and political leaders provided concrete assistance to many of the growing firms.

Economic development is a faddish field. Each state and locality scurries to come up with new ideas to set itself apart from its competitors; most are quick to copy other communities lest they fall behind. The competition sometimes breeds a cynicism that all the activity has only a marginal impact. Perhaps the individual efforts of local entrepreneurs are enough to create islands of growth in rural areas. Or maybe a low tax rate is all that is required.

However, research findings indicate that in twelve of the sixteen counties studied, there were organized efforts over a long period of time to help local businesses grow and to recruit new employers. In two additional counties, past efforts had brought firms to town, and recent employment gains came from the growth of these firms.[4]

Of the eight counties that experienced growth during the period between 1979 and 1984, all had been working at economic development for at least twenty years, and some for as long as forty years.

The eight growth counties identified by the states showed employment gains only since 1984. Even so, five of the new counties have been working at economic development since the late 1960s and early 1970s. Only three experienced large employment gains within a year or two after beginning serious development efforts; all were due to recruitment. Whether these counties will continue to grow over a longer period of time remains to be seen.

What are these communities doing? What are their economic development activities and who in these communities is involved? The rest of this chapter will answer these questions in detail.

KEY #5: A Pro-Growth Attitude

It is commonly said that communities must have a pro-growth attitude to succeed in development. In practical terms, this means that key people in the community must be willing and able to commit the time, effort, and resources and to take the risks necessary to help firms with their problems.

These characteristics—willingness to invest energy and take risks in order to create wealth—comprise the definition of entrepreneurship. So, high-growth communities also can be considered entrepreneurial communities.

In the high-growth communities studied, industrial recruitment was an important part of creating an entrepreneurial or pro-growth climate. Several of the high-growth communities were capable of mounting aggressive recruiting campaigns. In addition, these communities did not rely on any single source of information for leads. They tapped everyone from their local business and industry people or old college friends to the state department of economic development. Then, when a prospect is identified by these communities, they can mobilize a wide array of expertise.

- The business and political leaders of Wahpeton, North Dakota, for example, can assemble a group that includes the mayor, the community development director, a bank executive, a utility company executive, and 3M plant managers with an ease that makes it evident that these people have worked together many times before. The group is well versed and enthusiastic and presents a unified force. Members can answer questions on virtually any topic, including industrial sites, buildings, utilities, taxes, the workforce, the school system, or financial incentives. Not only does the group have the blessing of local government, but a representative of the local government is always is part of the group. The town has a videotape to show its resources and attractions. Local businessmen can cite specific examples of cooperation among local banks and the power company in making loans, and of success in winning community development block grants (CDBGs) for local businesses.

- Barry County, Missouri can attribute several firms to scouting by a local, for-profit industrial development corporation, to a local, quasi-governmental commission, a few more to leads from the state, and at least one firm to an old college friendship between two businessmen.

Other high-growth communities are not particularly sophisticated about marketing, but they have at least one local person who can speak knowledgeably about the town's resources and sometimes about financial incentives and arrangements. Typically, this person is a businessman who represents the chamber of commerce or is a professional employed by an economic development commission. He almost always operates with the blessing of city and/or county government.

- Valley City, North Dakota was put to the test one Saturday morning when a prospect literally fell out of the sky. A businessman had hired a private plane to fly down the interstate highway, looking for a possible industrial site. When he saw a large, apparently vacant building, he landed the plane at the small airfield and walked to a house

nearby. Its occupant called around and found the town's leading businesspeople were all gone for the weekend—all but one banker. The banker quickly arranged to visit the site. When it was not thought suitable, another location was found. The banker persuaded the prospect that the town would help bring a rail spur and other improvements to the site.

If local leaders are willing to extend themselves only for branch plants, this could easily discourage local residents who are trying to start, maintain, or expand business enterprises. But in the high-growth communities, findings indicated that local leadership also emphasized troubleshooting for local businesses. As one economic development professional put it, "we give the same attention and just as much help to our current businesses as to possible recruits." Indeed, recruitment is a part of creating a positive climate for economic activities of all kinds. The process of identifying the assets of a community and telling outsiders about them helps enlarge the definition of what is possible for members of the community.

Troubleshooting involves keeping abreast of the problems facing existing businesses and identifying ways the community can help (e.g., infrastructure improvements and additions, specialized training for the workforce, or financial assistance). In Lebanon, Missouri, a retired businessman keeps in touch with the community's businesses and industries, always asking about any problems or needs. He then communicates this information to the appropriate person—a local banker, a university extension specialist, a local elected official.

Staying informed about the needs of local businesses can pay off in a crisis situation, for example, when there is a threat a firm will close or move out.

- Last year in Fort Scott, Kansas, a flood destroyed the facilities of a homegrown trucking operation that employed nearly 300. The city rapidly moved to obtain a $400,000 CDBG to help the company rebuild. What could have been a great loss—the company had considered making a fresh start in a new location—turned out to be a significant gain for Fort Scott.

- Dodge City, Kansas, worked quickly to retain Chaffins, Inc., the central warehousing operation for Gibson Discount Stores. In the mid-1980s, Chaffins found itself needing a new facility, but the only suitable sites in the Dodge City area did not have roads, water, or services of any kind. Chaffins began to search elsewhere. Faced with the potential loss of 100 jobs, the local development corporation worked with the city to secure two CDBGs—one to provide water and sewerage to Chaffins' new site and one to build roads. Thus, Chaffins was persuaded to stay in Dodge City, construct a new facility, retain 100 existing jobs and add 30 more.

KEY #6: Finance, Sites and Buildings, and Infrastructure

In the high-growth counties, the research found that many kinds of assistance were made available to businesses. No type of assistance surfaced as singularly effective. Communities employed a full range of familiar tools, including financial assistance, help with sites and buildings, and infrastructure development.

FINANCE

As the quest for economic development has grown more competitive, a number of financial tools have increased in use. They include industrial revenue bonds, local bank use of various loan programs, local government use of various state and federal grants, and tax incentives. Most business and political leaders in the high-growth counties reported that financing was the most important element in their economic development efforts.

Industrial revenue bonds. In virtually all the eight counties that experienced rapid growth in 1979-1984, towns had industrial development authorities that issued tax-exempt industrial revenue bonds (IRBs). Findings demonstrated that in many of these towns (including Lebanon, Cassville, and Monett in Missouri; Auburn in Nebraska; and Fort Scott in Kansas), industrial revenue bonds were widely used and very popular for financing start-ups and expansions of both local and recruited firms.

Local banks. Interviews unanimously confirmed the common complaint that it is difficult to obtain financing for new or growing manufacturing enterprises from most rural banks. However, in about half the high-growth counties, local banks were praised by business leaders for their willingness to finance the expansion of existing business and industry and their participation in the recruiting process. Some local banks (e.g., Norwest in Wahpeton, North Dakota) were praised for their expertise in making commercial and industrial loans. Others (e.g., First National in Dodge City, Kansas and Boatman's National in Cassville, Missouri) were commended for their willingness to participate in Small Business Administration (SBA) and Farmers Home Administration (FmHA) loans in order to provide financing for small business start-ups and expansions. These same banks also have been active participants in local recruiting efforts, discussing financing possibilities in detail with potential recruits. Several banks also are credited with purchasing industrial revenue bonds when there were no other buyers. In these high-growth counties, rural banks often are a key player in economic development.

Grants. In the 1970s, a number of grant programs for economic development were developed and implemented by both the federal government and state governments, providing another financial resource for rural areas. In the high-growth counties, the most heavily used were reported to be Community Development Block Grants (CDBGs, which are administered by the state for rural areas), Urban Development Action Grants (UDAGs), and Economic Development Administration (EDA) grants.

CDBGs have been used extensively to finance the construction of roads, water lines, sewer systems, and even buildings—features that are both included in recruiting packages and used to support the start-up or expansion of a local business or industry. In the 1970s, CDBG grants were often used to establish local revolving loan funds. More recently, state-authorized CDBGs have been used to finance the construction of buildings for recruited industries in Perryville, Missouri; Cuba, Missouri; Macon, Missouri; Lake Mills, Iowa; and Lebanon, Missouri. In Valley City, North Dakota, a CDBG recently was used to finance the purchase of equipment for a local entrepreneur. UDAGs were used in Cuba, Lebanon, and Cassville to extend city water to Missouri industrial sites.

Tax incentives. In the high-growth communities, tax incentives have become popular only in the 1980s. Property tax abatement of various terms (e.g., five-year or ten-year) have been used in Macon, Cuba, Perryville, Fort Scott, Garden City, and Wahpeton. Of these, Macon, Cuba, and Perryville (all in Missouri) also have state-designated enterprise zones, which enables industries to take advantage of state income tax credits.

An innovative combination of several financial tools were used to finance the start-up of a computer hard disk manufacturer in Valley City, North Dakota. The city used CDBG funds to make an equity investment, which made it possible for the firm to secure loans from all three local banks, from the Bank of North Dakota, and from the SBA. This is an excellent example of how important financing can be. Valley City secured the hard disk plant because it was able to put together a complex financial package.

SITES AND BUILDINGS

Local efforts to help businesses to obtain favorably priced industrial sites—particularly for recruitment and industry expansion—date back to the 1950s. At that time rural landowners were not willing to sell sites for industrial development at anything but a premium, and sometimes not at all, partly because farming could provide a good living. In many communities, industrial parks have been built since then to provide sites. Two-thirds of the towns in the sixteen high-growth counties have industrial parks.

In several of the original high-growth communities, business leaders formed for-profit development corporations that purchased well-sited properties as they were put on the market. Thus, the development corporation was ready to provide favorably priced sites for recruited firms or local expansion when the need arose. This strategy paid off handsomely for Monett, Missouri, where the local development corporation was able to provide successive sites for a rapidly growing window manufacturer, which was first recruited as a two-man operation out of St. Louis. This manufacturer now employs more than 400.

As rural economic development has become more competitive, sites and buildings have become an increasingly important part of high-growth

communities' efforts. But often the sites are outside existing industrial parks. Two-thirds of the industrial parks in the high-growth communities still have vacant land, and development is occurring outside the parks.

Wherever they are located, industrial sites generally are assembled by partnerships between local governments and the business community. They acquire property and buildings that can be offered to an expanding or recruited industry at subsidized prices (as with Columbia Precision Disk in Valley City) or even at no cost. In Mexico, Missouri, the town actually set up a turn-key operation to recruit a manufacturer of corrugated shipping containers. In high-growth counties it was quite common for the local municipality to extend water, sewers, and roads to industrial sites at no charge to individual companies, other than the user fees paid by other utility customers.

INFRASTRUCTURE

Business leaders in the high-growth communities firmly believed that adequate roads, water lines, sewer systems, and electricity are important components of economic development. They were committed to excellence in their school systems—not only to serve as a drawing card in their recruiting efforts, but as a way to maintain a well-educated workforce and citizenry.

It is the jurisdiction of local governments to provide much of the basic infrastructure. In the high-growth counties, local governments were commended by business leaders for fulfilling this responsibility in a timely and cooperative fashion. And as discussed in the section on finance, these local governments know they can tap into federal grant programs—particularly UDAGs and state-administered CDBGs—when seeking funds for infrastructure development and improvement.

There were only a few instances where local government did not help to provide infrastructure. In both Dodge City and Garden City, the giant beef packing plants were on their own when it came to getting roads, water, sewer, electricity, and natural gas. But these cases are definitely exceptions, not the rule.

Although having a good infrastructure was important to the economic development of the high-growth counties, it is not a decisive factor. There are countless rural communities, with more than adequate infrastructure, wondering when their economic growth is going to happen. The message, then, seems to be this: the prospects for economic growth in a rural community are probably better if it has adequate infrastructure in place than if it does not. However, simply having adequate infrastructure does not guarantee success. The cost of providing adequate infrastructure and the speed with which it can be put in place are more important.

The research did not attempt to measure how important these incentives—financial assistance, sites and buildings, and infrastructure—were to the firms in these communities. State and local incentives sometimes

are criticized as being unnecessary subsidies. It was beyond the scope of the study to assess whether the incentives helped the firms stay in business or kept them in the community.

There was no doubt among local leaders in high-growth communities that the concrete assistance they provided was a significant financial incentive to firms. They also believed it demonstrated that new companies were welcome in their communities.

Practical assistance with financing, sites, and infrastructure are only part of the story. Almost without exception, business leaders in the high-growth counties agreed other factors are important in making their rural location attractive. The factors included:

- Low operating costs, a result of comparatively low taxes and low wage rates;
- A strong work ethic, low employee turnover, and no tradition of confrontation between management and labor;
- Good school systems, producing a well-educated work force; and
- Clean air, open spaces and other amenities that make a rural community "a great place to raise a family."

Perhaps these should be added to the list of keys to success. However, as explained in Chapter One, rural communities increasingly are in competition with foreign counties that have a strong work ethic and lower wages. Clearly, a low-wage, low-skill strategy would not work well for rural communities in a highly competitive global economy. Rural communities will have to rethink their competitive position, build on enduring advantages—like strong community institutions and a good work ethic—and rely less on outmoded factors like low wages and plentiful, semi-skilled labor.

KEY #7: Leadership: Partnerships and Sparkplugs

Research indicated that most high-growth counties had a well-organized partnership of local leaders who worked for economic growth and diversification with the support of local government. It was commonly found that one individual plays the role of "sparkplug," maintaining the partnership through good times and bad. (In two counties, however, local leadership amounted to a single shrewd businessman who took risks and went to great lengths to get the financing he needed to bring his ideas to fruition).

It was found that local partnerships included three kinds of people: business leaders, economic development professionals, and other local leaders. The participation of business and industry leaders is critical to the success of local partnerships. Often, leading real estate developers, owners and managers of local businesses, bankers, utility company executives and retired businesspeople are actively involved. One economic

development professional insisted that his board consist entirely of local businesspeople:

> We agreed the board should have no prior government experience. I wanted the hardest core professional businessmen for our corporation. The city supports us, but our base is in the business community.

Business and industry owners and operators are adept at using the "soft" tools (e.g., making contacts, selling the community, and providing expertise). Many of these same businesspeople also can provide expertise on financing and site possibilities. The following examples are typical:

- When Excel Corporation was looking to locate a beef packing plant in Dodge City, Kansas, they needed to have a local entity take an option on the industrial site, just in case the deal fell through. Enter a local businessman, who—in twenty-four hours—was able to solicit enough financial commitments to buy the site if Excel found it could not. As it turned out, Excel was able to proceed. Today Dodge City is the site of Excel Corporation's largest beef packing plant. This is just one example of this particular businessman's leadership. He also is an active member of the Kansas Cavalry, a state-wide organization of businesspeople. On their own time and money, cavalry members travel to the nation's business centers to promote Kansas.

- A real estate developer in Osceola, Iowa organized the Clarke County Development Corporation. This developer committed his time, energy, business knowledge, and money to recruiting new industry and helping existing businesses grow. Another real estate developer in Valley City, North Dakota was similarly active in his community.

Although the lack of financing from local banks often is mentioned as a constraint on growth, there are some cases where local bankers have assumed a leadership role. Bankers can bring to the table a willingness to take on business and industrial loans, knowledge of and willingness to participate in government loan programs (SBA, FmHA, etc.), and a willingness to take an active role in crafting financial packages for individual firms. When the previously mentioned Dodge City businessman was working with Excel Corporation, he had a local bank president at his side to help with financing details. This same banker also has participated in a number of SBA loans for local business expansions.

In addition to bankers and businesspeople, local partnerships include other community leaders, such as mayors, county commissioners, newspaper editors, and officials and faculty of community colleges or four-year colleges.

Elected officials can be supportive in three ways: by making public funds and resources available, by helping to create a positive climate, and by becoming personally involved in economic development activities. In all of the high-growth counties, the local elected officials got high marks

from local businesspeople for cooperating with economic development efforts, for providing infrastructure when the need arose, and for raising revenue in some cases. The attitude of local elected officials can be the key to creating a favorable climate for economic growth. Some elected officials have a particularly strong personal involvement in economic development activities. For example, the mayor of Lake Mills, Iowa serves as the town's liaison to the Iowa Department of Economic Development. This partnership resulted in the recruitment of two branch plants for Lake Mills, with CDBGs used to finance some of the construction.

State universities and community colleges provide many resources that support development efforts, including meeting facilities, library materials, computer facilities and training, and Job Training Partnership Act (JTPA) training. Sometimes college and university officials participate personally in local economic development activities.

- The president of Peru State College in Peru, Nebraska has been doing his part to stimulate economic growth in the southeast corner of the state. When he saw a newspaper article about stiff competition for telemarketing personnel in the Omaha area, he contacted the firms mentioned in the article to propose his college campus as a business site. Tele-communications Marketing Inc. subsequently set up an operation on the Peru State campus, employing about fifty.

Newspaper editors can be valuable leaders, as they usually are aware of local attitudes and can encourage development efforts that are responsible and well-conceived. In one Missouri town, the newspaper editor served as full-time economic development director.

Besides businesspeople and other local leaders, the third group of participants in local partnerships consists of economic development professionals, such as chamber of commerce executives, officials of local development corporations, city or county directors of economic development, and university extension specialists.

Having a full-time professional working on economic development can make a big difference in a community's efforts. In some towns, the economic development director has become something of a hero. For example:

- In Cuba, Missouri, their full-time professional has been instrumental in bringing fifteen new employers to town in less than two years. Formerly employed in private business as an expert on industrial location, he has a good knowledge of finance. He is authorized to offer a firm a site, roads, water, electricity, tax abatements, and anything else that will make Cuba more competitive.

Full-time, paid professionals are a phenomenon of the 1980s in these communities. Research indicates that although six of the new high-growth communities hired directors of economic development, the eight high-

growth communities that prospered in 1979-1984 managed without a professional. Typically, this position is funded by some combination of city, county, and local business and industry money. In addition to being the resident expert on economic development, the paid professional often acts as a catalyst for the ideas and efforts of other local leaders.

Of the six people paid to work full time to promote economic development in their community, only one had prior professional training. The others included a newspaper editor, a community activist recently elected to the state legislature, a former schoolteacher, and local businesspeople with no special training. The lack of professional training can be a handicap, at least at first. As the former newspaper editor put it:

> The first year or so, I had a lot to learn. I took several courses at the university and they were very helpful. And you learn on the job. But much of my job does not require technical skills. You keep track of things and make sure that other people get them done.

There are several ways in which community leaders organize themselves to work toward their community's economic growth. The different kinds of organizations are shown in Table 10. They include:

Economic Development Corporations—There is a continuum of ways in which an economic development corporation (EDC) may be organized. At one end of the continuum is the for-profit corporation formed exclusively by private businesspeople. In fact, the EDCs formed in the 1950s and 1960s generally were of this type. (These are the ones that purchased sites for future industrial development). At the other end of the continuum are the not-for-profit economic development corporations formed by various partnerships between city governments, chambers of commerce, private industry and, occasionally, county governments. Such arrangements are a fairly recent phenomenon, with economic hard times bringing the various parties together. These EDCs are the ones that provide sites and buildings, sometimes at greatly subsidized prices or sometimes free.

Economic Development Commissions—In two of the original high-growth counties, there are economic development commissions performing many of the functions that EDCs perform in other communities. These organizations actually are an arm of the local chamber of commerce. Although they are funded largely by private donations, local governments also have been known to "kick in the occasional dollar."

Industrial Development Authorities—IDAs are primarily a mechanism through which localities issue industrial revenue (or development) bonds. As discussed earlier, revenue bonds are a heavily used source of financing for business and industry start-ups, expansions, and recruits in the high-growth counties.

Local Offices of Economic Development—Some communities have hired full-time people to coordinate financing packages and provide other assistance to existing business and recruits. These organizations generally do

TABLE 10. LOCAL ORGANIZATIONS PROMOTING ECONOMIC DEVELOPMENT IN SIXTEEN HIGH-GROWTH COMMUNITIES

Type of Organization	*Primary Function*	*Sponsorship*	*Professional Staff*
Industrial Development Corporation	Sites	2 for-profit 6 non-profit, quasi-governmental	0
Industrial Development Commission	Sites	2 non-profit, linked to Chamber of Commerce	0
Industrial Development Authority	Tax-exempt bonds	7 non-profit, quasi-governmental	0
Office of Economic Development	Promotion, not sites	5 non-profit, quasi-governmental 1 city government 1 county government	5 1 1
Chambers of Commerce	Promotion	8 non-profit	0

*NOTE: In two of the sixteen high-growth counties, there is no organization that promotes economic development.

SOURCE: Field interviews in high-growth counties, 1987.

not own sites, but they might arrange leases, financing, and other assistance for recruited firms or for existing businesses. Typically, such offices are funded by local governments. Most, however, operate as private, nonprofit organizations and are guided by boards comprised of local business leaders.

In addition to having the proper organizations, the community must have a spirit of unity and cooperation. A common goal—such as jobs and growth—is essential. Moreover, there must be a free exchange of information, effort, and resources among the community's leaders. This means a local newspaper that supports economic development, a local utility company that provides rooms for meetings, a local elected official who provides access to the government bureaucracy, and a local businessman who scouts business acquaintances for leads, and so on.

In many communities, one additional ingredient seems to be helpful in maintaining unity among leaders and in keeping these organizations vital: the sparkplug. In five of the high-growth counties, one or two people stand out as sparkplugs for local efforts.

Sparkplugs are not dominating leaders, they are individuals who just keep things going. Usually, sparkplugs have a record of unfailing energy and commitment to the economic growth of the community. In a few cases, this person is a paid employee of the local economic development agency, but often it is a businessman who fills the role on an unpaid basis.

The operating style of each sparkplug varies as widely as their background and source of income. Some are charismatic, while others are quiet and work behind-the-scene. Some have special business skills or contacts, others are just persistent and on-the-spot.

KEY # 8: Support from Outside

Although local leaders in the sixteen communities saw themselves as self-starters and were proud of their accomplishments, they also recognized the importance of assistance from the state and federal agencies. From the local perspective, the most important form of outside support is financial—grants and loans for infrastructure, buildings, or operating expenses, industrial revenue bonds and, in some cases, training funds for workers. As Table 11 shows, business owners and community leaders reported 64 instances of state and federal financial assistance to the 102 firms responsible for growth in the sixteen counties.

In addition, several other forms of outside assistance are noted, including technical assistance to local businesses, assistance to local leaders in obtaining state and federal funds, information and data about local and national economic conditions, names of prospects for recruitment, and help in contacting foreign investors.

- The Center for Industrial Research and Service (CIRAS) at Iowa State University assisted two firms in Winnebago County, Iowa.

TABLE 11. USE OF FINANCING IN HIGH-GROWTH COUNTIES, 1979 TO 1986
(Estimated number of firms receiving assistance)

	Type of Financing							
Type of Firm	*IRB*	*CDBG*	*SBA*	*UDAG*	*EDA*	*State-financed programs*	*Total number of awards*	*Number of firms receiving assistance*
Recruited firms, 1979 to 1986	13	8	4	4	2	2	33	24
Local start-ups and expansions, 1979 to 1986	9	9	6	1	1	5	31	24
Total	22	17	10	5	3	7	64	48

SOURCE: Field interviews in high-growth counties, 1987.

CIRAS employs both university faculty and private sector specialists and provides assistance with engineering problems as well as with finance, accounting, marketing, and other business problems. CIRAS field representatives are former businessmen.

- In several Missouri communities, leaders mentioned the assistance provided by the Cooperative Extension Service. Extension personnel are a source of economic data and provide up-to-date information about state programs and legislation.
- A firm in Auburn, Nebraska became a supplier for a Japanese firm in 1979 after the Governor helped to make contacts and introductions.
- Overseas trade missions coordinated by the State of Missouri resulted in branch plants of Japanese firms for Mexico and Perryville.

CONCLUSIONS

This study confirms that there is no single way to attain economic diversification and long-term increases in employment. The sixteen high-growth communities tried a variety of approaches—recruitment; aid to existing firms; working with entrepreneurs; creating a positive climate; and giving tax breaks, financial subsidies, and cut-rate infrastructure. They were successful with many kinds of industries, though more often with traditional manufacturing than with high-tech or service industries. They continue to explore every conceivable strategy and approach that might keep a firm in town, help a local firm to grow, or recruit a new firm.

In most of these counties, growth appears to be the result of sustained, broadly based local economic development activities. The key elements appear to be a long-term, well-organized economic development effort; a pro-growth attitude expressed by a willingness to invest energy and take risks to help businesses; practical assistance to firms in the form of financing, industrial sites, and infrastructure; strong partnerships between business leaders and elected officials; an individual (sparkplug) to keep local efforts going; and technical and financial support from state and federal agencies. If there is a recipe for successful economic development in rural areas, this is it.

However, three caveats must be added to this conclusion. First, intensive local efforts to foster economic development will not always be successful. Besides the sixteen studied, other communities have been working diligently for years to build a stronger local economic base, but have had less success. This research did not address this issue. It would have required examining a sample of communities that had active local economic development activities rather than a sample of high-growth communities.

Second, it is not clear that local activities cause all of the growth. The causation may run in the reverse direction as well. The rapid growth in

the counties probably encourages more participation in local economic development activities. Winning teams generally attract plenty of fans.

Third, and perhaps most important, some communities may not be able or willing to muster a sustained, broad-based local development effort. The evidence from the sixteen high-growth communities suggests that it takes a large amount of dedication and personal energy by community leaders. In addition, individuals, local governments, bankers, and others in the community must be willing to make sacrifices, frequently in the form of dues to a private economic development corporation or higher taxes for publicly supported development efforts.

And the community must be willing to take risks. Bankers must take the risk of investing in unfamiliar enterprises, political leaders must take the risk of raising local expectations that growth can be achieved, and taxpayers must tolerate the risks associated with investing in new infrastructure for new or expanding businesses. Business leaders may even have to put some of their personal savings on the line.

Will all rural communities choose the high-energy, high-risk path that seems to be the only route to economic growth? Perhaps not. They may choose to try to preserve the community as they know it. Such a decision will have its down side, because the broad sweep of economic change seems to be running against rural areas. If a community is blessed with outstanding tourism resources or lies in the path of metro sprawl, it may gain employment without mobilizing a sustained economic development effort. However, if most rural communities choose not to invest their energies in economic development, the alternative probably will be a continued slow erosion of their economic base.

CHAPTER THREE ENDNOTES

1. In some respects, there are important differences between the two strategies. Industrial recruitment involves competing for wealth; entrepreneurship is a way of creating wealth. Recruitment involves subsidies to induce firms to relocate or open a branch plant in one place rather than another. To promote entrepreneurship, governments try to reduce the risks assumed by entrepreneurs by cutting taxes or reducing regulations, by creating mechanisms to pool risks or provide insurance to lenders, or providing financial or technical assistance.

   Entrepreneurship is a term that is used imprecisely. In the broadest sense, an entrepreneur is an individual who takes risks to build a profitable business. Often the term is used more narrowly to refer to new businesses.

   There are two reasons why the term "entrepreneurship" often is defined narrowly to cover only new businesses. One is that research and practical experience suggest small businesses, especially small new businesses, are a particularly dynamic part of the economy. David Birch's widely publicized research shows that a disproportionate number of new jobs are created through the growth of small businesses. The economic successes of Silicon Valley and the Route 128 area in Massachusetts also appear to be related to new "entrepreneurial" businesses. Here engineers from large electronic and defense firms

have quit their jobs and have taken their new ideas to new firms, which have grown rapidly to become major employers.

The second reason that entrepreneurship often is narrowly defined as the start-up of new firms is that policymakers frequently think in terms of programs. In the search for programs to promote entrepreneurship, an obvious solution is to help people "be entrepreneurs" by starting up a new business.

2. These data may understate the potential of development strategies that focus on new business start-ups. According to Mark G. Popovich and Terry F. Buss, "Rural Enterprise Development: An Iowa Case Study" (Washington, D.C.: Council of State Planning and Policy Agencies, 1987), the rate of new business formation in rural Iowa has been fairly high in the 1980s, only slightly lower than the rate in metro areas. About two-thirds of the new enterprises documented by CSPA were in retail trade and services. (The definition of "new enterprise" used by Popovich and Buss is somewhat broader than "new business start-ups by local residents." Over 60 percent were owned by a person who had been raised in the local community. The data also include new franchises and new branch plants).

   Our interviewees may have failed to mention new small firms in their communities, especially those in retail and services. Moreover, even if there were few start-ups in these communities in 1979-1986, it is possible that government programs to help entrepreneurs and increased public interest in entrepreneurship will serve as encouragements. For example, a recent study of Perkins County, Nebraska, one of the "boom-bust" counties in our study, reported on a 1986 effort to promote new business start-ups by local residents. The study reports that few firms have been started and two have the potential of creating between twenty and twenty-five local jobs.

3. James P. Miller and Herman Bluestone, "Prospects for Service Sector Employment Growth in Nonmetro America," in *Rural Economic Development in the 1980s: Preparing for the Future*" (Washington, D.C.: U.S. Department of Agriculture, Economic Research Service, Agriculture and Rural Economy Division, 1987), pp. 6-16, 6-17.

4. In two counties, recent growth did not appear to be related to organized local efforts to promote economic development. In these counties, the growth of employment was caused by the success of a local entrepreneur.

   In one case, the entrepreneur owns a large mobile home manufacturer. The firm began when the entrepreneur purchased a branch plant near his home town. Over many years, he built it into a major power in his industry and then retired from a day-to-day management role. During the era of expensive energy in the 1970s, the firm suffered greatly and laid off many hundreds of employees. The owner reasserted his role in the company, redesigned his business strategy, and has built the firm back up to its former size during the period covered by our survey. There are several other growing firms in the county, but the jobs created by the one firm makes up the lion's share of employment gains for the county.

   Another town owes its growth largely to the efforts of a man who, in his youth, left his long-time cattle-shipping home and worked in irrigated agriculture in California. After several years, he returned home and introduced irrigated agriculture to the area which, in turn, was used to support a feedlot industry. Before he died, this businessman also proved instrumental in recruiting the world's largest beef packing plant to his home community.

4

State Support for Rural Ecomomic Development

INTRODUCTION

When rural economic distress became widespread in the mid-1980s, state governments first responded by enacting various emergency measures. Many states faced serious budget problems and were forced to cut budgets sharply or to raise taxes, or both. Of eighteen Midwest and Mountain states, from the Mississippi to the Rockies, twelve adopted emergency budget cuts part-way through fiscal 1986 and sixteen took the same steps in fiscal 1987. All but two of these states proposed tax increases in fiscal 1987.[1]

Many states also created emergency assistance programs. Special employment/training programs were established for dislocated farmers throughout the farm belt and plains states. Typically, these programs included financial counseling and family counseling as well as traditional training and placement services.

Twenty-one states, including ten of the eighteen Midwest and Mountain states, established emergency farm finance programs. The total funding authorization for these programs rose to $1.7 billion by 1987.[2] This represented a small portion of the peak farm debt of $230 billion, but was a significant extension of state resources into an area where the federal government and private lenders had been the only players.

It is becoming increasingly clear to state officials and others that short-term emergency measures are not sufficient. The rural problem is more than a cyclical fluctuation or the bursting of a speculative bubble in the price of farm land. When the short-term collapse comes to an end, many rural areas will face a slower but long-term erosion of their economic strength.

Designing effective state rural development policies will not be easy. Rural prosperity cannot be built on agriculture or other traditional industries alone. Other parts of the rural economy, especially manufacturing, have experienced distress in recent years. Growth in service industries will be difficult to achieve. As state officials try to develop proactive rural policies, they must answer such questions as:

- Are statewide economic development efforts sufficient to address rural problems?
- Are special rural initiatives needed?
- Is "rural" the right word?
- Should states design their initiatives for all rural areas or for other categories, such as small towns or distressed areas?
- Of the scarce resources available, how much should be put into special rural initiatives and how much into other initiatives, like science and technology, export promotion, or tax cuts?
- How much impact can states have on rural economies?
- Would resources be better spent in other parts of the state?

No consensus answers to these questions have yet emerged. The scene is changing very rapidly. In 1986, new Governors were elected in ten of the eighteen Midwest and Mountain states and ten others with distressed rural areas. These new Governors are establishing new economic development initiatives; most have established special task forces or commissions to examine the special needs of rural areas. In addition, many incumbent Governors in the midsection of the country also are taking initiatives directed toward lagging rural areas.

One goal of this project was to identify promising ideas for states as they turn to the task of designing long-term strategies for the rural economy. This chapter provides an analytic overview of the kinds of initiatives states can take to address rural economic problems.

The options for states are grouped into broad categories:

- Building strong statewide economic development strategies.
- Targeting and customizing economic development initiatives through rural industries, business development, and community leadership.
- Organizing in new ways to address the problems of distressed or rural areas.

This chapter is based on a national survey of state rural initiatives. Governors' offices were surveyed in December 1986 to identify rural development initiatives and to solicit ideas for addressing economic distress in sub-state regions whether or not they are rural. On-site interviews were conducted in eight states, officials from several states were interviewed by telephone, and written materials were gathered about other state rural initiatives.[3]

BUILDING STATEWIDE ECONOMIC DEVELOPMENT STRATEGIES

Rural economies do not exist in a vacuum; they are closely linked to nearby metro areas. Thus, the first step toward an effective rural development strategy is to be sure statewide economic development strategies and programs are adequate.

The competition for jobs and economic growth, between the United States and other countries and also between the states, has intensified sharply in the 1980s. The increase in competition between states has led to four important changes in state economic development strategies.

First, industrial recruitment, which has been the traditional staple of state and local economic development agencies, is changing. Recruitment is becoming more sophisticated. States are targeting specific industries that complement or strengthen the existing state economy and are offering new incentives, such as customized job training and taxable bonds. Recruitment also has become an international activity, with sharp competition for foreign investment dollars. Moreover, there is a widespread awareness that industrial recruitment can be a zero-sum game when the competition takes the form of subsidies rather than investments that enhance the productivity of the state's economy. States are seeking ways to limit zero-sum recruiting. Some individual transactions have been questioned as poor uses of public funds. But a code of good practices has not yet been developed.[4]

Second, a new array of state economic development programs have been borne:[5]

Small and new business. States have recognized the disproportionate number of jobs created by new firms and the dynamic minority of small, rapidly growing firms. The result is new programs to provide financial and technical assistance to small and new businesses as well as efforts to adjust tax and regulatory structures to favor them.

Science and technology. In a competitive world, success depends on linking scientific progress more tightly to the development of new products and services. For a state, it means developing closer links between universities and industry; for firms, it means enlisting the research community as a partner in industrial progress and speeding the application of scientific advances to the marketplace.

Exports. In a competitive world, economic success also means capitalizing quickly and precisely on new market opportunities. For many firms, this involves a new focus on overseas markets. For states, it means new efforts to promote exports and raise the general level of understanding of foreign markets, languages, and customs.

Human skills. To maintain a high standard of living, Americans must be more productive. This requires not only better equipment and more up-to-date technologies but also a high level of human skills. States have recognized high-quality public schools are the basis of a sound economy; workers must have adequate opportunities and incentives to refresh and upgrade their skills.

There are important differences among the states in how aggressively they have invested in new economic development programs. By and large, the differences have followed regional rather than partisan lines. Some

states, especially in the industrial Northeast and Midwest, were hit hard by the recessions of 1980 and 1982 and by increased foreign competition in the early 1980s. Many of these states also had traditions that allowed for more interventionist economic policies. Spurred by economic adversity, they revamped their economic development policies and established many new programs.

Other states now are considering how much they should invest in new economic development programs. In some states, there are constitutional barriers that make it difficult for the state to provide direct financial assistance to private firms.

Third, states are moving from "retail" involvement in individual business deals to a strategy of catalyzing "wholesale" change in private sector institutions. The newer style of economic development programs looks beyond individual transactions to the productivity of the state's economy. The goal is not only to "buy" jobs directly by providing incentives on a deal-by-deal basis, but to catalyze broad institutional change so that businesses, universities, schools, and workers respond more quickly and effectively to economic challenges and new opportunities.[6]

Increasingly, states are working through other channels, such as statewide and local public-private partnerships, the financial industry, and educational institutions to accomplish their economic development objectives. States catalyze change in these institutions by articulating a vision of how local economies might change; by enlisting private sector leadership in developing economic policy and in delivering programs; by targeting resources to assist in the transitions to new economic realities; and by establishing performance standards and incentives to guide public institutions in new directions. For example, Governors, university presidents, and industrialists have established new public-private partnerships to stimulate closer links between researchers and businessmen. Thus, research agendas can be driven by industry's needs and new technologies can be applied more quickly to commercial products.

Fourth, the definition of "a favorable business climate" is changing. Traditionally, it meant a low-cost business climate with low taxes, a light regulatory burden, and perhaps low wages. For some industries, this definition is still valid. But as states try to maximize the high-tech, high-skill, high-wage portion of their economies, other factors are as important as low taxes and reasonable regulation. High-tech, high-skill firms also are concerned about the quality of the university system and of the public schools, the linkages between universities and industry, the availability of modern telecommunications systems, and the availability of capital to new and innovative businesses.

States do not need to make a choice between the traditional "low-cost" strategy and the new "high-quality" strategy. Some of the states that have made the largest investments in technology, expert promotion, and other new programs also have cut taxes, streamlined bureaucracies, and ration-

alized or lightened the regulatory burden. Tax structures can be adjusted to promote investment in research, venture capital, and pay-for-productivity schemes. Some of the new initiatives, such as raising teacher salaries or establishing new applied research centers at universities, can be relatively expensive and make it harder to cut taxes; others are relatively inexpensive.

The goal is, in fact, neither a low-cost nor a high-value climate, but rather an entrepreneurial climate. An entrepreneurial climate is one in which individuals and institutions compete, take risks, place a high value on economic development, and are willing to invest energy and resources in growth.

Several states in the Midwest and West that have large rural areas are reorganizing their economic development strategies to meet increased global and domestic competition. Oklahoma, for example, has been especially active in export promotion and industrial recruitment, including the attraction of foreign investment. New legislation in 1987

- Establishes an Oklahoma Futures board to prepare a five-year plan and advise the department;
- Establishes an Oklahoma Center for the Advancement of Science and Technology to support applied research, establish centers of excellence at state universities, support eminent scholars at universities, give matching grants to winners of federal Small Business Innovation and Research (SBIR) grants, establish a clearinghouse for technology transfer and technology referral services, and establish a seed capital revolving fund;
- Establishes an Oklahoma Capital Investment Board to mobilize private sector equity and near-equity capital to assist in the diversification of the state's economy by making tax credits available to investors; and
- Consolidates state economic development financing programs in the Oklahoma Development Finance Authority and revises procedures for the issuance of state bonds and of private activity bonds which are exempt from federal income taxation.

Oklahoma is addressing the special problems of rural areas in two additional ways. Its planning efforts include a task force on rural economic development. The state also is working to establish sub-state, regional public-private partnerships to design and implement economic development strategies. Some of these regional efforts are coalitions of metro and rural areas; others primarily are rural.

Minnesota is another state that is revamping its economic development strategy and investing heavily in new initiatives. Prompted in large measure by concern about rural economic distress, in 1987 the Governor and the legislature developed the Greater Minnesota Corporation, a private, not-for-profit corporation established to receive state funds and to promote

the economic well-being of the state, especially outside the Twin Cities region. The enabling legislation leaves broad discretion as to which activities are funded and how heavily. The Greater Minnesota Corporation is to receive over $100 million in state funds for its various programs. At this writing, its board of directors has been named and some staff have been hired. Thus, it is too soon to describe the corporation's activities or define the extent to which the corporation will focus its efforts on rural areas. Allowable activities include:

- Issuing challenge grants for regional public-private partnerships to help establish revolving loans to encourage private investment in rural Minnesota. (Eligible businesses include technologically innovative industries, value-added manufacturing, agriprocessing, information industries, and agricultural marketing. Retail development cannot be supported. The regional challenge grants build on regional organizations which were stimulated by grants from the McKnight Foundation);
- Making matching grants to public and private post-secondary institutions for applied research and development projects;
- Creating up to four regional research institutes at or near post-secondary institutions in rural Minnesota;
- Making equity investments in private businesses to nurture new products and enterprises, including the purchase of stock, participation in limited partnerships and joint ventures, loans and loan guarantees, interest subsidies; and
- Studying the feasibility and design of a for-profit venture capital corporation.

The legislation also authorized a Rural Development Board, which will oversee the activities of state agencies as they affect rural areas. It is described in more detail below.

TARGETING AND CUSTOMIZING ECONOMIC DEVELOPMENT INITIATIVES

The process of economic development in rural areas is largely the same as in metro areas. The goals are the same: more jobs, better jobs, and a sounder economic base. Essentially, the state's role is the same: providing a vision and a framework for local initiatives, catalyzing change, and providing key resources like information, technical assistance, and specialized financing. Many economic development programs can work effectively in both rural and metro locations.

Some state officials assert that because of these similarities, it is not necessary or appropriate to establish separate programs for sub-state areas. One experienced professional, from a state widely recognized as a leader in economic development, puts the case forcefully:

Most sophisticated states do not do special things for rural areas. Rural areas and metro areas are economically interdependent. The same tool kit works in both rural and urban areas.

But rural areas are different in some ways, and state initiatives can be customized to address these differences. Furthermore, some parts of the state may be facing different economic problems than others. The state can target resources to these distressed areas.

States are searching for ways to target and customize their economic development activities. It would be misleading to give the impression that there are readily available models for how this can be done. In this area, even more than in crafting statewide economic development initiatives, the late 1980s are a time of trying to understand more clearly the relationships between rural and metro economies, and of looking for new answers to the distinctive problems of rural areas.

One approach to customizing focuses on industries, which are especially important to rural areas. Often, this results in efforts to slow the decline of established rural industries by revitalizing them with new technologies or new markets. This approach also can involve bringing new or expanding industries to rural areas, such as tourism, health care, retirement communities, and industries that require good telecommunications links to their customers but otherwise can be located anywhere. Examples of the latter include information processing and catalog mail order sales.

A second approach to customizing focuses on problems that are faced more often in rural areas or on special circumstances that arise in managing state programs in rural areas.

Low population density generally implies a different mix of human skills and relationships. In rural areas, individuals often hold multiple leadership roles. There may be fewer individuals with specialized technical skills. There are fewer institutions providing services of a specific kind, so there may be less competition and less specialization. Some institutions may lack specialized expertise; for example, banks may have experience in lending to farmers and retail merchants but little skill in designing and assessing industrial loans. Rural communities also may have certain advantages, such as less bureaucracy, greater familiarity with other parts of the community, and strong loyalty, even by those who have left to seek their fortune elsewhere.

States can help fill the skill gaps that rural areas face. They can provide specialized skills and private sector incentives to extend these services.

A third way of customizing focuses on community leadership. As Chapter Three suggests, proactive, united community leadership is essential to maintaining economic growth in the face of adversity. This is probably not unique to rural areas. Recent studies of rejuvenated industrial communities like Lowell, Massachusetts, come to the same conclusions about leadership as research on the high-growth counties indicated. Strong community-wide support for economic diversification and growth, sparkplugs,

public-private partnerships, and sustained effort were just as important in Lowell as in Macon County, Missouri.[7]

But building strong leadership may be more difficult in rural areas. One reason is rural leaders often lack the specialized skill and training that metro leaders have. States can take the initiative to promote the development of strong local leadership, to assist such leadership where it exists, and to foster regional cooperation.

Customized Initiatives: Rural Industries

American farms are among the most productive in the world. In large measure, it is because of public support for agriculture through land grant universities, federally funded research, and the Extension Service. The federal government, states, and counties all provide financial support for this system.

In recent years, states have increased their assistance to agribusiness. State departments of agriculture, which used to be primarily regulatory-oriented with some marketing functions, have expanded their role. In addition, many state economic development departments have added specialists in agriculture and related industries.

The new generation of state initiatives has focused less often on technology and production of traditional crops than on alternative crops (e.g., vegetables, fruits, flowers, and exotic crops), direct marketing, high-quality or special identity products (e.g., "Pride of Dakota," "Taste of Texas," and "Wyoming Lean Beef"), food processing, part-time farming, or procurements by state agencies. These new state initiatives have been documented by other studies and will not be discussed in detail here.[8] Typical of such initiatives are:

- Vermont, Oregon, and other states have marketed high-quality, fashionable vegetables at Bloomingdale's department stores.
- The New York Department of Commerce, in cooperation with the Department of Agriculture and Markets and the Office of General Services, conducts an information program to advise in-state farmers about selling to state institutions. The department provides one-on-one counseling to businesses interested in state or federal procurement contracts.
- Massachusetts has an aggressive agrimarketing program that includes barter deals with foreign countries, bi-state promotions (e.g., Massachusetts cranberries and Colorado lamb), a Farm Trails program to encourage tourists to buy directly from farmers, and an Integrated Pest Management program to respond to the market for foods that have less pesticide residue.
- The Florida Agricultural Economic Development Policy Act of 1987

establishes a two-year pilot program that encourages cooperatives, limited partnerships, and grower-owned business entities.

- In 1987, Montana established an Agricultural Development Council that helps to create incubators for agriculture-related businesses in sub-state regions, employs a professional to explore markets in the Pacific Rim, makes seed capital grants for the development and commercialization of new products and processes, and invests in other agricultural diversification projects.

States with large mineral deposits have established special programs to promote the mining industry, for example, by aiding the development and use of new technologies.

- In 1985, Ohio voters approved issuance of $100 million in bonds to help support research on the clean use of Ohio's high-sulfur coal. The Ohio Coal Development Office administers this program and also promotes the use of Ohio coal and the installation of clean coal technology.

- In 1987, Minnesota passed legislation calling for a ten-year plan to increase the knowledge of the state's mineral potential, stimulate the development of mineral resources, and promote research. The legislation also appropriated funds for accelerated mapping and evaluation of mineral resources.

- The Pennsylvania Rural Economic Development Act of 1987 directs the Department of Commerce to provide financial assistance to research and demonstration projects relating to the disposal and reuse of brine and other wastewaters produced in conjunction with oil and gas operations.

States with significant timber reserves have established special programs to develop this resource through research, development of new products and markets, and attention to regulatory and tax issues affecting the wood industry.

- The West Virginia Forestry Development Act of 1987 established a hardwoods research center and created a commission to study the management, taxation, and marketing of timber and wood products.

- The state foresters of Michigan, Minnesota, and Wisconsin worked with the U.S. Forest Service and the Conservation Foundation to assess their resource base, to begin to identify new markets for the states' timber reserves, and to address issues arising from the more intensive use of timber.

- Legislation passed in 1987 in Pennsylvania empowers the Department of Commerce to assist in establishing a non-profit corporation to promote the state's hardwood industry.

Many states have focused on the tourism industry as a key element in their economies. Data on state spending for tourism does not differentiate between rural and metro areas. The data show a jump from $18 million in 1982 (41 states reporting) to $84 million in 1986 (38 states reporting) for advertising. Other state spending on tourism promotion rose from $65 million to $176 million during the same period.

Tourism is one area where sub-state regions can work together more easily than they can on industrial recruitment, for example. States also have invested in state parks as a way of promoting economic development in rural areas.

- Legislation passed in 1987 in Pennsylvania authorizes small grants to local development districts to prepare regional tourism brochures and maps and to prepare regional tourism development plans.
- The Ohio Department of Development provides matching grants to local non-profit organizations for advertising and promotion of tourism.
- The Massachusetts Department of Environmental Management issued a Request for Proposal (RFP), selected a private developer, and will invest $8.5 million for the planning and construction of a four-season resort in rural northwest Massachusetts. The site is a parcel of land, adjacent to a state park, that had been purchased by the state. The department conducted an extensive public planning process in developing initial plans and the RFP.
- In Maryland, the Governor has given close attention to tourism as a diversification strategy for western Maryland, a rural area that has lost many manufacturing jobs. The state is studying five state parks and forests as possible skiing, lodge, or dude ranch sites, and has matched a local contribution to develop a scenic railroad.

Other initiatives have specifically addressed building non-traditional industries in rural areas. For example, the Washington Department of Community Development and the Utilities and Transportation Commission are studying the feasibility of introducing office-intensive industries into rural areas. The department is assessing the telecommunications facilities available in rural areas, comparing the costs of rural versus metro locations, examining trends in the location of office-intensive industries, and looking at possible applications of telecommunications and computers in farming, timber, wood products, aquaculture, and fishing.

Customized Initiatives: Business Development

It is difficult to measure how effectively states are customizing their business development initiatives to address rural conditions. Until recently, states have been slow to establish separate or targeted business develop-

ment programs for distressed or rural areas. Reporting on a 1983 survey, a 1985 paper by the U.S. Advisory Commission on Intergovernmental Relations states:

> The record of state aid to distressed communities in economic development can be improved. . . . Only in targeting to businesses owned by minorities or the disadvantaged, among all the economic development indicators, are at least half of the states active.[9]

This criticism may be inaccurate and outdated. Informally, some states report they are especially active in non-metro areas because big cities have their own capable, well-financed programs and do not need or want lots of state assistance. Furthermore, state activities in non-metro and distressed areas have been increasing.

Community Development Block Grants (CDBGs) have been important in focusing state attention on non-metro areas. Since 1982, states have had the option of administering these federal funds for cities and towns under 50,000 in populations that are not central cities. (Larger cities and counties with populations over 200,000 in metro areas receive funds directly from the U.S. Department of Housing and Urban Development as an entitlement). By fiscal 1987, forty-nine states managed the CDBG-small cities program. Most operate the program on the basis of a competition rather than through a formula-based distribution to local governments.

In fiscal 1986, about 15 percent of state CDBG funds were set aside for economic development projects, with half devoted to infrastructure and 34 percent to housing.[10] Because of the flexibility of the CDBG program, some states view it as an opportunity to set economic development priorities for non-metro areas. Along with other funds not earmarked for non-metro areas, they use CDBG funds as "glue money" to fund a non-metro strategy.

In addition to multi-purpose CDBG funds, several custom-designed initiatives addressing rural problems should be mentioned. Business finance is an area where states have been active. Several states have designed initiatives to increase the access of rural businesses to specific kinds of capital—seed capital, financing for nontraditional businesses (e.g., enterprises not related to agriculture or to retail sales), or loans that are too large for small rural banks and too small for large money center banks. Most state financing programs serve both rural and urban areas, but some are targeted to address rural conditions. For example, the State Bank of North Dakota, an entity of state government, has recently hired an industrial loan specialist. This specialist will analyze loans brought to the bank by private banks for participation and also assist small banks in rural areas with their analysis of non-traditional industrial loans.

Some states have taken other initiatives that are specifically focused on rural areas or are believed to be especially effective in rural areas.

- Washington gives tax credits for the creation of new jobs and sales tax deferrals for expenditures on plant and equipment in counties with high unemployment rates. The state also operates community revitalization teams to provide a coordinated response and technical assistance by state agencies to distressed communities and businesses. In addition, there are set-asides for distressed areas in the Washington Service and Conservation Corps and in vocational education grants.
- Thirty-two states have established enterprise zones in distressed areas, many of which are in rural locations. Eighteen of Florida's thirty enterprise zones are in communities with under 50,000 population. Arkansas has 272 active zones, most of which are in rural areas.
- Kentucky gives tax credits to companies that hire workers who have been unemployed for over 180 days; this has been particularly effective with small businesses in rural areas.
- Pennsylvania has funded local development districts to hire export promotion experts.
- Ohio's small business development centers and small business enterprise centers, which provide technical assistance and specialized expertise, are located mostly in rural areas.
- Alaska provides rural development assistance grants of up to $100,000 for projects that will promote economic development in rural communities. The grants can be used to plan or help construct health clinics, city offices, electrical generation and distribution systems, libraries, and day care centers.

Customized Initiatives: Community Leadership

Every community has leaders. Especially in communities facing economic adversity, economic development depends on the skills of these leaders, on their commitment to economic development, and on their ability to gain community support. Leadership also must be proactive. Community leaders must anticipate and manage change and stay informed in order to understand and help meet the challenges their communities face.

Outside entities can support the development of strong leadership. One approach is to train people to become leaders or to improve their skills. Private foundations, the Extension Service, farming and commodity groups, and chambers of commerce have been especially active in this area. Universities and state agencies also can provide support or sponsorship.

- The W.K. Kellogg Foundation has supported leadership development programs in rural areas since the 1930s, often in cooperation with the Extension Service and state universities. Currently, the foundation is providing seed funds for fourteen programs in the United States

and one program abroad. State departments of agriculture also have contributed funds as in Illinois and Washington, and have operated programs as in Colorado. These programs commonly provide two or three years of training for groups of twenty to thirty-five young farmers, businesspeople, and rural residents who have leadership potential. They attend briefings, seminars, and take trips to Washington, D.C. and overseas to become more familiar with the political and economic issues facing their states and to develop their leadership skills.[11]

In addition, states can develop community preparedness programs that help guide a community's economic development plan. In some states, these programs are part of a certified community program that awards certification to communities that prepare a plan and then implement it by organizing economic development corporations, developing marketing plans, assisting local businesses, or building the necessary community facilities to attract businesses. Certified community programs can be a good starting point, but leaders in many of the high-growth communities felt these programs were too elementary to be of use. At the time of the interview, most of these communities had had over a decade of experience in economic development.

- The Community Preparedness Program operated by the University of Wisconsin-Extension has received awards as one of the best of such efforts. Staff from the state university and from district offices work closely with individual communities to organize economic development partnerships, prepare plans, and work on specific projects.

- The Missouri Community Betterment Program offers technical assistance and resource information to communities to help them establish and work toward community and economic development goals.

The state also can help build the capacity of local leaders, governments, and institutions by providing the resources—dollars and expertise—that may be lacking in small communities.

- California's Rural Renaissance Program provides funds to rural counties to develop economic plans, create revolving loan funds, and market their communities as sites for industrial location. The state's Rural Development Assistance Program is a continuation of a federally funded demonstration project. Through offices in rural areas, it provides staff and seed funds to hire engineering consultants to prepare applications for federal water, housing, and community facility grants.

- The capacity-building elements of the Pennsylvania Renaissance Communities Program have included providing state funds to meet

the matching requirements for federal water and sewer grants, establishing a Community Economic Recovery Program of matching grants for the preparation and updating of municipal development plans, and issuing grants to community action agencies and other non-profit community groups. Fiscally distressed communities can receive up to 80 percent of the match required for economic development projects. The new administration is reviewing these and other economic development programs with the goal of making them more effective, especially in combating economic distress.

- Legislation passed in 1987 in Minnesota recognizes the limited fiscal resources available to small rural communities by relaxing the match requirements of construction grants for municipal wastewater treatment plants. The legislation also allows state agencies to relax planning requirements for wastewater projects in towns with under 1,500 people.

Finally, and perhaps most important, states can be a valuable source of information for local leaders. A great deal of information is available to everyone about broad economic and technological trends. The state's special contribution can be to marshal information about how local and regional economies can be affected by these trends and to gather, evaluate, and distribute information about local economic developments.

The information management function of the state is sometimes informal and often undeveloped. Many states do support offices of business research at state universities, and state departments of economic development sponsor annual "state business outlook" conferences. A few states, including Oklahoma and Minnesota, prepare annual "Economic Reports to the Governor," modeled loosely after the federal "Economic Report of the President."

ORGANIZING TO ADDRESS THE PROBLEMS OF RURAL OR DISTRESSED AREAS

Another way states are seeking to respond to rural economic distress is to find new ways to mobilize resources and make them accessible to rural areas. As they develop new organizational structures, states must resolve two issues.

First is the issue of defining the term "rural" (e.g., non-metro, small town, or remote). A related question is whether "rural" is the right concept. Perhaps some states should organize their sub-state efforts around other concepts, such as distressed areas, or sub-state economic regions like labor market areas.

A second issue is more fundamental: the duplication of state services. As noted earlier, most of the economic problems faced by rural areas are not unique. It would not be efficient to create two separate systems—one

in rural areas and one elsewhere—to support economic development. Nor is it necessary. Indeed, the key is ensuring that rural areas, along with other sub-state regions, have easy access to all of the specialized resources that a state can provide.

Many state officials feel strongly about the dangers inherent in fragmenting state initiatives. One of the central precepts of modern state economic development initiatives is that the power of the Governor be used to cut across the categorical lines created by state agencies. The structure of federal programs and the differing cultures of the professionals involved in economic development often create confusion. In the words of one state economic development expert:

> The federal world is broken up artificially into separate constituencies which don't talk to each other. What we have in our state is a continuum of programs and a variety of access points, so that a business, a professor, or a community can link into the whole system at many different points. We design our programs around the concepts of access and decentralization, not around special rural offices or rural programs.

States have responded in two ways. They have encouraged the development of sub-state regional economic development activities and have established specialized advocacy offices for rural or distressed areas.

Encouraging Regional Economic Development Efforts

Rural areas often lack strong regional institutions. Rural America is highly fragmented into towns, counties, and communities that are fiercely independent, even though they may be linked by commuting and shopping patterns. Although metro America is also fragmented, institutions, like banks, real estate businesses, and large manufacturing firms, more often have a metro-wide perspective. In rural areas, these same institutions usually are either local or statewide or multi-state, and they often have headquarters in a metro center. So rural areas often lack strong, multi-county economic institutions.

There are at least four advantages to a regional approach to economic development in rural areas. First, the population of a sub-state region is larger than that of a county or town, so there is a larger pool of individuals with specialized skills in leadership or in economic matters.

Second, the financial resources available to an individual county or town also are limited. Regionalism offers at least the promise of pooling funds.

Third, economic growth in one community often benefits neighboring communities and counties where part of the workforce will live and shop. When the focus is on industrial recruitment, the benefits are more concentrated; only one community gets the tax base. But as the focus shifts toward helping existing businesses and encouraging new businesses, the competition between towns can fade.

Fourth, regionalism is a convenient way for states to deal with rural areas. In many states, the number of individual communities suffering economic distress is so great the state lacks the resources and time to work closely with each one. It is possible to set priorities among communities and give the most attention to those most likely to succeed or to those in greatest need. Distress can be measured. Pennsylvania, for example, differentiates between economic distress and fiscal distress. The state has used a HUD formula for determining economic distress. The formula takes into account age of housing, per capita income change, population change, job lag/decline, poverty, labor surplus area, and the unemployment rate. A community qualifies as fiscally distressed if it meets these criteria and others, including revenue capacity, revenue/expenditure balance, and tax effort. An early warning system is being designed to identify municipalities that may face fiscal distress. Technical assistance and other resources would be provided to such communities.

Predicting success is harder than measuring distress. As this study indicates, success depends in a significant way on the ability of local leadership. This is difficult to measure objectively. So it is difficult to target state resources to those communities that are most likely to be successful. States can use regional institutions as a way of assuring resources are distributed to all parts of the state and as a way of cutting down on the number of competing applications for state resources.

States have taken different approaches to building regional institutions for economic development.

- Oregon has allocated $25 million to a new Regional Strategies Fund that allows counties to decide on the parameters of regional cooperation. Each county commission must hold public hearings to invite comments on suggested regional strategies and on regional groupings of counties. Regional strategies are submitted to the economic development department for review and approval, and the state is given the responsibility for assuring local efforts are linked with each other and with state and private initiatives. The Governor allocates funds among competing regional strategies but cannot award funds for a second regional strategy until all regions have received funding.

- In Oklahoma, the Governor has invited private sector leaders to step forward to help create new regional economic development public-private partnerships. The Governor and state officials meet with regional partnerships as they define their boundaries and objectives. In northeast Oklahoma, the region has defined itself as both metro Tulsa and adjacent rural areas. In other parts of the state, rural areas have joined together.

- In 1986-1987, Pennsylvania provided $850,000 in state funding to Local Development Districts (LDDs). These also are the local delivery system for the Appalachian Regional Commission. LDDs play a

central role in planning, coordinating, and delivering economic development services, especially in non-metro areas.

- Iowa's regional economic development initiatives are guided and coordinated through fifteen regional coordinating councils. The councils are regionally based consortiums with representatives from government, business, and educational institutions, such as community colleges.
- The Governor of Colorado established five regional task forces for the non-metro areas to develop recommendations for a state rural development strategy. Each task force consisted of a cross section of private and public sector leaders and was divided into three subcommittees—tourism, agriculture, and business/community development. The reports from these regional committees are being used as the basis for a statewide rural strategy.
- In Virginia, the Southwest Virginia Economic Development Commission is the state's first regional strategic planning effort. Its initial focus is on marketing strategies, education, natural resources, tourism, transportation, and utilities.
- New York works through regional economic development councils, which develop regional strategies and compete for grants and loans. The program is available to all parts of the state, but it emphasizes rural affairs and such industries as agriculture, timber, and food processing.

State Rural Offices

In the late 1970s, several states established rural development offices, often supported in part by federal funds. Most of these offices lapsed in the 1980s when funds were withdrawn, though special rural initiatives did continue in California and Minnesota, among others. Currently, there is a revival of interest in state rural affairs offices.

When decentralization of state activities is not enough, other options are available to ensure rural areas have access to state resources. States can establish offices for rural advocacy or offices to coordinate the use of federal and state programs by rural areas.

- The New York Office of Rural Affairs, established in 1987 as part of the Office of the Governor, has defined its mission as "serving as an advocate, ombudsman, and facilitator . . . a one-stop contact point for rural officials and agencies/organizations interested in rural issues . . . [and a] coordinator and integrator of various programs and activities that . . . address rural needs."
- The Maryland Rural Development Program includes an interagency state-federal committee, which undertakes joint project review. Proj-

ects must be consistent with a locally developed strategy that meets the planning requirements of the U.S. Economic Development Administration and the comprehensive plan requirements of the U.S. Department of Housing and Urban Development.

Another approach is to establish written guidelines to ensure rural areas get their "fair share" of state dollars; state programs are managed with a sensitivity to rural areas.

- In Minnesota, 1987 legislation mandates the preparation of a comprehensive state rural investment guide. It will be used by a new Rural Development Board to ensure the programs of all state agencies respond to rural needs. The guide, which currently is being prepared, will consist of policy statements, objectives, standards, and program criteria to guide state agencies in establishing and implementing programs relating to rural development. The guide also must include a mechanism to coordinate and allocate private and public resources to rural areas.
- By executive order in 1986, the Governor of Illinois directed state agencies to spend 25 percent of their budgets in rural areas. Within a year after the order, seventy-five of seventy-nine agencies reported they were in compliance. The forms and timetables for making these reports are being revised to dovetail with budget cycles. In addition, state agencies are being requested to submit rural policy statements to the Rural Affairs Council in the Office of the Lieutenant Governor. This council is directed to prepare a comprehensive state policy on rural development. The legislature has not yet approved funding for the council, but it has been operating on a limited basis with existing funds.

CONCLUSIONS

Many states are now developing strategies to address the problems of rural economic decline. The first step in a rural development strategy is to revitalize the state's statewide economic development strategy. This includes developing new programs, in addition to traditional industrial recruitment. Public-private partnerships can be created to catalyze change in economic and business institutions. States also can address the special problems of rural communities or of all distressed regions. Such "customized" initiatives might be focused on industries that are important in rural areas, on such problems as the lack of specialized expertise in many rural communities, and on encouraging the creation of new regional institutions to work for economic growth.

Developing solid, widely understood models for state rural economic policy is expected to take several years. One need only consider the time industrial states took to develop new statewide economic development

initiatives and get them into operation. For example, in Massachusetts, most new state programs were set up in the 1973-1977 period. In Pennsylvania, Michigan, and other states, a year or more was spent on analyzing the problems facing their industries before strategies were proposed and programs were created.

As states experiment with new kinds of economic development policies, new answers to the question of how rural areas fit into statewide policies will emerge. In states that are predominantly rural, the statewide initiatives can be customized to the distinctive conditions in rural areas. In states with both rural and metro areas, a special package of rural initiatives could be designed to link rural areas more tightly with growing metro economies or to address the distinctive problems of rural communities. If both rural and metro areas are experiencing economic distress, a special package might be designed for all distressed areas.

CHAPTER FOUR ENDNOTES

1. National Governors' Association and National Association of State Budget Officers, *Fiscal Survey of the States 1987* (Washington, D.C.: NGA and NASBO, March 1987), pp. 3, 16.
2. Mark G. Popovich, *State Emergency Farm Finance: Volume II* (Washington, D.C.: Council of State Policy and Planning Agencies, April 1987), p. 2.
3. Another valuable resource was profiles of rural development legislation passed by states in 1987. Sharon Lawrence, "Selected State Legislative Rural Development Initiatives" (Washington, D.C.: National Conference of State Legislatures, July and August 1987).
4. For suggestions on how industrial recruitment might be rationalized, see Blaine Liner and Larry Ledebur, *Foreign Direct Investment in the United States: A Governor's Guide* (Washington, D.C.: National Governors' Association, Committee on International Trade and Foreign Relations, 1987); and DeWitt John, *Shifting Responsibilities: Federalism in Economic Development* (Washington, D.C.: National Governors' Association, 1987).
5. For a comprehensive analysis of these new programs, see Marianne K. Clarke, *Revitalizing State Economies* (Washington, D.C.: National Governors' Association, 1986); National Governors' Association, *Jobs, Growth, and Competitiveness* (Washington, D.C.: National Governors' Association, 1987); David Osborne, *Economic Competitiveness: The States Take the Lead* (Washington, D.C.: Economic Policy Institute, 1987); and Committee for Economic Development, Research and Policy Committee, *Leadership for Dynamic State Economies* (New York: Committee for Economic Development, 1986).
6. The concept of "retail" and "wholesale" strategies is taken from Osborne.
7. Ross Gittell and Nancy J. Kelley, "A Tale of Three Cities: New Approaches to the Revitalization of Our Depressed Industrial Communities," September 1987, unpublished; and Gittell and Kelley, "A Framework for Community Revitalization: Managing Change Through Innovation at the Local Level," 1987, unpublished. These papers, by the directors of the Community Revitalization Project at the Center for Business and Government, Harvard University, analyze the process of revitalizing industrial centers in Lowell, Massa-

chusetts; Jamestown, New York; New Bedford, Massachusetts; and the Lower Mon Valley, Pennsylvania. Many of the themes in their studies are similar to our findings.

8. See William E. Nothdurft, *Going to Market: The New Aggressiveness in State Domestic Agricultural Marketing* (Washington, D.C.: Council of State Policy and Planning Agencies, 1986).
9. Advisory Commission on Intergovernmental Relations, *The States and Distressed Communities: The Final Report*, Washington, D.C., November 1985, p. 110.
10. U.S. Department of Housing and Urban Development, *1987 Consolidated Annual Report to Congress on Community Development Programs*, Washington, D.C., 1987, p. 49.
11. Daryl K. Hensley, ed., *Directory of Statewide Rural and Agricultural Leadership Programs*, Northeast Regional Center for Rural Development, Pennsylvania State University Press, 1986.

5

Crafting State Rural Strategies

This final chapter returns to the opening question: How can states respond to economic adversity in rural areas? The chapter does not present additional research findings; instead it presents an interpretation based on this and other research conducted by the National Governors' Association and elsewhere.

The chapter offers six operating principles for state economic development initiatives and shows how they might be applied to rural economic problems. It is too early to say that these will be "keys to success" in rural areas. State rural economic initiatives are too young to measure their impact. But there is some evidence the principles may work, because they can be and have been applied successfully in other settings.[1]

The chapter also suggests several areas for further research and discussion.

PRINCIPLE # 1: Anticipate and Adapt to Change

States should organize their policies around understanding and adapting to changes in economic and demographic conditions and in technology, rather than providing long-term subsidies.

The first principle for state rural policies rests on the fact that states cannot gain control of economic events. Opinions are divided over how extensively a government should try to manage economic affairs. Public discussion of economic policy is still dominated by debates between interventionism and the "free market." But the reality is that the United States has moved into a global economy and lacks strong international institutions to manage economic affairs on a global basis. The ability of the federal government to manage the economy has diminished in recent years. States have even less control of economic events. [2]

However, states can help anticipate and adapt to change. They can gather and evaluate information about broad economic trends, project the consequences of these trends on the local economy, and craft initiatives

to help the workforce and local business community respond more effectively to change. The key is to develop a *proactive* policy, a policy that is based on informed understanding and aimed at positioning the local economy for the best possible future. State rural policy should be designed in this context.

Many communities already have learned this lesson well. The high-growth firms and communities demonstrated their ability to adapt quickly and effectively to changes in economic conditions. There are several examples in high-growth communities of firms that changed their products, found new markets, or used new technologies. Research indicated that these communities are flexible; for example, they realized that opportunities for recruiting branch plants are more scarce, thus their economic development efforts must focus on existing businesses and new firms.

States can and should encourage rural communities to seek ways to profit from economic change. Individual communities will compete, but this does not mean rural development is a zero-sum game. Sometimes competition for growth is zero sum, with firms relocating from one town to another. But competition also encourages businesses and communities to think of new ways to create wealth and to increase productivity. As a result, the competitive position of the state and the country will improve. The challenge for state rural policy makers is to help rural areas become more effective competitors. The key for meeting that challenge is to understand and adapt to change.

PRINCIPLE # 2: Catalyze Change in Institutions

States should seek to catalyze change in private and public sector institutions and individuals, to improve their ability to respond to changing economic, demographic, and institutional factors.

Many rural businesspeople said that rural banks, for example, needed to change their traditional lending patterns. The research identified several institutions that had changed their mission and way of operating. The availability of finance was reported to be a critical factor in the high-growth communities. Where local banks were willing and able to make loans to non-traditional businesses and to work with SBA programs, it was considered to be a significant contribution to local growth. Where banks focused their lending on farming and retail, this was viewed as an impediment to the growth of local manufacturing and service firms.

Other institutions operating in new ways in the high-growth communities include colleges and the Extension Service. Colleges work closely with industry on training programs, extending technical assistance to existing firms and helping new businesses. In several states, the Extension Service provides technical assistance to rural communities on economic development as well as farming.

PRINCIPLE # 3: Support Community-Led Growth Strategies

States must make a basic package of assistance available to all communities and support strong community-based initiatives where they develop. Within general parameters set by the state, decisions should be made at the sub-state and local levels as much as possible.

The findings of this project suggest that a community-led approach to rural economic development may work best. As Chapter Two indicates, one cannot predict where growth will occur, so state officials must gain a thorough understanding of the state and sub-state economy, chart a broad strategy, and be prepared to respond to opportunities as they emerge in individual communities and industries.

Information about the "high-growth communities" presented in Chapter Three also supports a community-led strategy. If success depends on sustained, broad-based local initiatives, the state must be prepared to assist local leaders in developing sound strategies and then to work with local leaders on these locally developed strategies. The high-growth communities visited did not see the state government as a leader, stimulator, or driving force. Leaders in these communities saw states as conduits of federal funds and repositories of financial and technical resources.

Some top-down decisions must be made. State and federal resources certainly are limited, and some decisions must be made about which communities and firms are helped and which are not. What is needed is a community-led strategy for targeting state resources. Such a strategy might have four elements.

First, the state could provide a basic package of economic development services to all communities, including guidelines and technical assistance about how to evaluate the growth prospects of individual communities, how to organize local coalitions, and how to set goals and objectives. Some states provide such assistance in conjunction with a "certified community" program. However, these programs are often too elementary for experienced communities and sometimes do not offer enough practical assistance.

Second, the state could establish an advocacy and information function to ensure statewide programs are customized to rural and other distressed areas. The need for and design of such an activity would vary widely according to the geographic, economic, institutional, and political structure of the state. The advocacy operation might be organized around rural interests if the state's rural areas are quite different from the metro areas and if most rural areas are distressed. In other cases, the advocacy function might be organized for small towns—irrespective of their location, for distressed areas, or for sub-state economic regions.

The responsibility for advocacy could be lodged in an economic development or community affairs agency if its programs are directed to helping

rural areas. If there are distinctive human resource, education, or environmental problems in rural or distressed areas, then the advocacy function could be lodged in a planning or policy agency, in the Governor's office, or in a cabinet council.

Third, states can encourage communities to work through sub-state regional organizations. The advantages of regionalism were set forth in Chapter Four: assuring outreach to all parts of the state, enlisting local involvement in setting priorities and allocating resources, and encouraging cooperation between localities.

Fourth, states can allocate their financial and technical resources on the basis of payoff, defined in terms of the greatest impact on the rural economy. Some communities will not be able to mobilize long-term, sustained development efforts. Since such efforts seem to be an important ingredient for economic growth in rural areas, investing state resources simply on the basis of need, high unemployment, or low income, may be wasteful.

Objective standards would be helpful in targeting resources effectively. Such standards should measure not only the immediate impact of jobs created by investing in individual deals, but also the indirect impacts of catalyzing changes in institutions. Few such standards exist. Perhaps the best states can do is establish explicit measurable goals and document what happens. Unfortunately, the burgeoning state experiments with economic development—specifically rural development—are not well-documented. Often, the same program title means different things from one community or state to the next. Documenting these initiatives in the states and localities is an important federal responsibility that has not been fulfilled.

Fifth, states must enter into new alliances and partnerships with the other players in rural policy. The next two "principles" address federal-state alliances and partnerships between the private and public sectors at the state and local levels.

PRINCIPLE # 4: Work Through Public-Private Partnerships

Business leaders play a key role in economic development; new partnerships between government and business leadership must be created.

In most of the high-growth communities, business leaders have the greatest responsibility for local economic development activities as they have both the technical skills and the personal commitment to economic growth. In some communities, elected officials and local government employees also are key players. In others, the driving force is clearly in the private sector with local government providing the support and framework for economic development activities.

At the community, sub-state regional, and state level, new kinds of organizations are emerging to mobilize private sector leadership and to

involve these leaders in setting policy, finding resources, and implementing specific activities. In high-growth communities, there were a broad variety of organizations. In recent years, many communities have turned to private, non-profit economic development commissions that receive public sector support and have professional staff. However, several of the high-growth communities so far have managed without professional staff.

PRINCIPLE #5: Build New Federal-State Alliances

Federal-state relationships in economic development should be restructured to reflect the increased scope of state activities and to focus the federal role on activities that state and local governments cannot undertake.

As well as working with new public-private partnerships, states must renegotiate the federal-state alliance. Although the research was focused on the state and community levels rather than the federal level, it did illustrate the importance of federally funded programs in high-growth communities and presumably in other rural areas.

For decades, the federal government has had a much larger role than states in rural economic development, including:

Infrastructure. Multi-billion dollar federal investments in infrastructure—through the Rural Electrification Administration, the Farmers Home Administration, the Tennessee Valley Authority, water projects in the West, the Appalachian Regional Commission, and the interstate highway system—have brought enormous benefits to rural areas.

Price Supports. Federal spending on farm price supports has grown to $25 billion in 1987. Payments go to a small minority of rural residents (primarily those who raise wheat, corn, soybeans, cotton, or rice). And since the payments are linked to production, smaller farms receive smaller payments. However, price supports currently account for over half of net farm income.

Institutions. The federal government supports several networks of organizations, including rural electric cooperatives; the Cooperative Extension System; local development districts, funded partly by the Economic Development Administration; regional councils of government; and various public-purpose, quasi-governmental entities like community development corporations. Each has an interest and a track record of involvement in various aspects of rural economic development. Sometimes these institutions work closely with state government; often they do not.

Aid to Rural Business. Federal economic and community development programs—namely those of the Economic Development Administation and Small Business Administration, Community Development Block Grants, the rural set-aside of Urban Development Block Grants, and Farmers

Home Administration business-industry programs—are an important source of financing for businesses in the high-growth communities and elsewhere in rural America.

Federal spending on price supports has risen dramatically in the 1980s, but other programs have shrunk. At the same time, states are broadening their activities in economic development. As Chapter Four of this paper suggests, this renaissance of state economic development recently has begun to include a renewed interest in rural areas. Unlike that of the late 1970s, this generation of state rural activities is an initiative of state government, rather than one driven by federal spending.

An expanding role for states in economic development, including rural economic development, is both likely and desirable. There are several reasons. One is that federal budget pressures make the expansion of federal programs unlikely, irrespective of the policies of future federal administrations. Many states, however, have demonstrated a willingness to appropriate additional funds for economic development activities. The budgets of state economic development agencies have quadrupled in the 1980s. Even more important are the initiatives states have taken to redirect policies and expenditures on elementary and secondary education, higher education, highways and other infrastructure, and training to promote economic development.

A second reason for a stronger state role in economic development is that development needs to be linked to activities that have traditionally been state concerns. To prosper in a highly competitive, multi-polar, unmanaged global economy, countries need strong microeconomic policies to increase the productivity of their workforce, communities, and businesses. States traditionally have been the major funding source and setter of guidelines for certain kinds of investments in productivity, especially public education. And, states have long had a major role in managing federal investments in transportation and training.

A third reason for state leadership is that a decentralized response to new economic conditions is highly desirable. The global economy faces a future of turbulence and uncertainty. In this context, there is a premium on flexibility, experimentation, and diversity. States have greater freedom than federal agencies to craft initiatives to respond to diverse local conditions, greater ability to experiment with new approaches, and better track records in building meaningful public-private partnerships.

The expanding role of states in economic development does not imply the end of the federal role. The federal role is not diminished, just different. It includes assisting those states that are experiencing sudden or chronic economic adversity and undertaking activities where there are large economies of scale. For example, federal leadership in economic development will continue to be essential in supporting research and development and in gathering information about the economy and about state and local initiatives.[2]

On the other hand, the federal government could delegate more responsibility for designing and managing economic development programs to states, so the programs can be integrated into a flexible, comprehensive development strategy. Within each state, new alliances must be developed between "line" state agencies such as departments of economic development, community affairs, and labor, and the networks of "rural" organizations that have received extensive federal support over the years. In some of the high-growth communities, these agencies are closely linked with state and local economic development activities; in others, they are not.

The process of shaping these new alliances is an opportunity for renewing and refocusing the agendas of these other organizations. They all are much older players in rural policy than state government. The Extension Service dates back to the Smith-Lever Act of 1914 and traces its lineage to path-breaking activities of the U.S. Department of Agriculture in the 19th century. Rural electrification dates from the 1930s, and local development districts from the 1960s. Needless to say, rural America is quite different from what it was when these entities were created. Each must constantly strive to address the conditions of the 1990s and the 21st century.

For example, the number of farmers has dropped dramatically since Extension was created. Farmers' education, sophistication, and access to technical information is much greater. The basic objectives of Extension—making specialized technical skills available in rural areas and linking universities with industry to achieve greater productivity and to improve the quality of life—are as important as ever. The challenge is to apply them to new populations, new technologies, and new problems and, at the same time, forge new alliances with state economic development programs.

PRINCIPLE # 6: Support Entrepreneurship, Defined Broadly

State economic policy should encourage entrepreneurship in the broad sense. That is, states should encourage flexible, growth-oriented firms at all phases of development, including new firms, small growth-oriented businesses, and dynamic larger corporations.

Usually, industrial recruitment and aid to new businesses are seen as alternatives, as the old and new approaches to economic development at the state and local levels. But many growing companies in the high-growth counties did not fall neatly into either category. Many were existing businesses, some were recruited entrepreneurs, others were recruits that expanded after settling into the community, and still others were branch plants that were purchased and revitalized by local entrepreneurs.

It is time to move beyond the debate between recruitment and new businesses. The drawbacks of a strategy based on recruiting large branch

plants are clearly understood: there are fewer branch plants and more competition for them; the costs of recruiting large branch plants are going up; in most industries and most kinds of communities, small businesses contribute more to employment growth than large establishments; and relocating plants is a zero-sum game adding nothing to the overall productivity or competitive position of the states or country.

However, a narrow focus on either branch plants or on new firms will miss many opportunities. The idea of promoting entrepreneurship should be flexible enough to cover all kinds of growing businesses. The key elements of entrepreneurship are

- Strong interest in creating wealth;
- Skill and creativity;
- Investment of personal energy; and
- Willingness to take risks.

An entrepreneurial economic policy can foster these characteristics at all stages of the development of a business, from start-ups by people who have never owned their own business, to start-ups by experienced businesspeople, to expansions of small firms, to the creation of branch plants. The policy also could define how establishments relate to each other as independent firms, subcontractors, potential merger partners, or branch plants.

In some industries, the potential for employment growth may lie in independent start-ups. However, start-ups are fragile and need a supportive environment. It may be that some kinds of firms, especially high-tech, high-skill, and high-risk firms, "incubate" better in metro centers or close to major universities.[3] The comparative advantage for rural areas, at least for those which lack a major research university, may lie in other kinds of new and growing firms, including those in a later stage of growth phase. Once entrepreneurs have become established, they may be able to move (with their contacts and firms) to rural areas.

From the state perspective, the same kind of careful targeting of businesses by growth phase may be appropriate. In addition, the state must consider whether encouraging localities to recruit entrepreneurs or other small and growing firms is zero sum.

IDEAS FOR DISCUSSION AND RESEARCH

This study suggests a number of ideas for further discussion and research. There are several interesting directions for future field research. The field work in the sixteen high-growth counties did not address recreation/retirement communities or rural growth due to metro overspill. It would be interesting to explore the notion of "successful" recreation-retirement communities, for two reasons. First, many states and rural areas are experimenting with rural development strategies that focus on tourism and

retirement. And, some rural areas experiencing rapid growth from recreation and retirement, for example Vermont, are beginning to question how they can manage or even moderate growth.

It also would be worth investigating the hypothesis that sustained local economic development activity is a necessary condition of rural economic growth. As suggested in the conclusion to Chapter Three, this would involve looking at whether slow-growth and average-growth communities have the same kind of local activities as those found in the high-growth counties.

The field research in high-growth communities could be replicated in other regions besides the Farm Belt. The successful approaches described in Chapter Three probably are universal. But, the dynamics of mobilizing rural communities, the role of states, and the kinds of assistance needed by businesses in other areas might be very different.

With respect to state rural initiatives, the overriding need is to document what is happening, with respect to statewide initiatives in rural states and sub-state rural initiatives. Experiments in the "laboratories of democracy" should be monitored and evaluated. Three issues deserve special attention: the shifting roles of the states and the federal government; the usefulness of "rural" as a concept for organizing and customizing state initiatives; and approaches for reducing the zero-sum aspects of industrial recruitment.

Finally, it would be useful to explore the question of whether businesses in certain phases of their life cycle, or in certain phases of a product cycle, prefer rural or metro areas. It also might be possible to develop and test hypotheses on the costs, risks, and benefits of government aid to businesses at different stages of growth.

CONCLUSIONS

Rural policy is at a crossroads. Serious, long-term economic problems have emerged. The blows that hit rural areas in the mid-1980s were devastating—the falling prices of farmland, oil, and many commodities, and the impact of the strong dollar on rural manufacturing. Although the worst of the collapse may be behind us, the long-term competitive position of many rural areas appears to be eroding slowly. This may be true of the majority of rural areas which are not buoyed by metro sprawl or by the growth of recreation and retirement communities.

Although the broad trends may be discouraging, they can be slowed or even reversed by communities that mobilize their energies and resources to support long-term, broad-based economic development efforts. States and the federal government can help rural communities anticipate and adapt to new economic realities.

There are signs of hope. At the federal level, agencies are searching to redefine their missions to be able to respond to new economic realities

and challenges. States are beginning to address rural problems through the development of new initiatives. Local communities are mobilizing their energies for economic growth. There is increasing interest in forging these efforts into a new federal-state-local alliance for rural development. Although it is too soon to say how many of these new initiatives will pay off, there is significant evidence that by effectively managing change, it will be possible to achieve a brighter future for rural America.

CHAPTER FIVE ENDNOTES

1. For a comprehensive analysis of these new programs, see David Osborne, *Economic Competitiveness: The States Take the Lead* (Washington, D.C.: Economic Policy Institute, 1987); Marianne K. Clarke, *Revitalizing State Economies* (Washington, D.C.: National Governors' Association, 1986); National Governors' Association, *Jobs, Growth, and Competitiveness* (Washington, D.C.: National Governors' Association, 1987); and Committee for Economic Development, Research and Policy Committee, *Leadership for Dynamic State Economies* (New York: Committee for Economic Development, 1986).
2. For a somewhat longer discussion of our diminishing ability to manage economic events, and of the consequences for the roles of the federal government and the states, see Everett Ehrlich and Raymond Scheppach, *New Directions in Economic Policy: An Agenda for the 1980s* (New York: Praeger Publishers, 1984); and DeWitt John, *Shifting Responsibilities: Federalism in Economic Development* (Washington, D.C.: National Governors' Association, 1987).
3. James P. Miller, "Recent Contributions of Small Businesses and Corporations to Rural Job Creation" (Washington, D.C.: U.S. Department of Agriculture, Economic Research Service, February 1987), pp. 4, 6. Miller writes, "findings on the source of employment growth in the late seventies lend support to the 'incubator/filter-down' hypothesis which holds that corporations at a certain stage of their industry's product life cycle tend to branch out to low-wage suburban and rural locations, whereas small independent businesses—especially those just starting up—are more likely to locate in urban areas."

Appendices

APPENDIX A. DETERMINANTS OF ECONOMIC GROWTH: A LITERATURE REVIEW

Clark Edwards, a senior economist with the United States Department of Agriculture, reviewed the post World War II to 1980 economic literature pertaining to rural development (Edwards 1981). He concluded that there were "several growth theories, all of them partial, most of them helpful, but none complete" (Edwards 1976). However, Edwards felt that together the theories can help us understand the process of rural development and can provide guidance for the design of public policies. Edwards organized the literature's findings into five explanations of regional changes in economic activity:

- Increasing resource availability;
- Advancing technology;
- Expanding markets;
- Conquering geographic space; and
- Building institutions

Not all growth theories or research can be classified into one and only one of the five categories. Most explanations of economic growth rely heavily on one basis of growth with occasional overlap into other categories.

In addition, there are aggregate or macroeconomic forces that can influence growth. These "outside-the-area" forces influence "inside-the-area" economic activity. A brief discussion and definition of the five categories—as well as aggregate and macroeconomic forces—follows. The discussion below uses Edward's framework in reviewing past and more recent research on location and economic growth.

Increasing Resource Availability

Increasing resource availability refers to providing lower cost resources—infrastructure, financial capital, and service and technical assistance—as a key to rural development. The basic idea is that more inputs will induce more output. Thus, to make a region grow one should provide it with more accessible and lower cost resources.

There is research to support the importance of access to resources as an important causal factor of growth. Infrastructure, for example, has been found to be a necessary ingredient for regional growth in several studies.

The most comprehensive study with respect to the effects of public infrastructure on growth was that of Mera in 1975. Infrastructure represents physical capital investments such as roads, water and sewage systems, electricity, telecommunications, airports, and railroads, which traditionally are supported by public investment. Infrastructure enhances the

quality of life and stimulates economic development (Fox 1981). Mera examined the growth characteristics of the nine U.S. census regions from 1947 to 1963. His conclusions were that the more developed regions grew as a result of growth in public infrastructure; less-developed regions grew as a result of growth in technology. Other studies found regions lagging in terms of real per capita income did so, in part, because of inadequate infrastructure (Salvatore 1976 and Biehl 1980).

Only a few studies have explored the relationship of public infrastructure to location decisions of firms or workers. Helms found government expenditures on highways and schools led to growth in state personal income. In contrast, Herzog, Schlottman, and Johnson (1986) found the location choice of high technology workers showed little sensitivity to public infrastructure services. Eberts examined the timing of the public infrastructure investment relative to that of private investment (1986, as reported in de Silva Costa, Ellson, and Martin 1987). He reasoned if public investments preceded private, then local areas could use public funds for infrastructure development to achieve growth. Eberts found the causation ran in both directions, depending on location and time. For example, private investment was more likely to influence public outlays (and not vice versa) in cities located in the South and in those that experienced above-average growth after 1950. In another study, Eberts (1985) found public infrastructure made a positive and necessary, but small, contribution to manufacturing expansion. He concludes that regional growth is not only influenced by growth in private capital and labor, but also by public capital. This conclusion was also supported by the research of Hulten and Schwab (1984) and de Silva Costa, Ellson, and Martin (1987). Fox concurs, but adds caution:

> Infrastructure was probably not the stimulus for growth in most places, but it was necessary to accommodate growth . . . New infrastructure may be important for development in other communities because they are prime candidates for specialized development, such as a retirement community.

However, the need for physical infrastructure may have been the need of a previous era of growth. "Good roads and airports are still important, but *intellectual* infrastructure is the key" (Osborne, "The New Role Models," 1987). This translates into quality education, organized research, and the nurturing of small independent businesses. Many state initiatives, for example, promote research and encourage quick commercial use of scientific advances. This has been done with financing such as the use of state-provided venture capital, through technology transfer programs, and through centers of excellence.

"Intellectual infrastructure" also is encompassed in the "increasing resource availability" basis for economic growth. Regional variations in growth can be explained by differences in regional endowments of natural

resources, human resources, or capital. The quality of resources is considered as important or more important than quantity. Thus, increasing resource availability might include better education of the workforce as well as, for example, supplying rural areas with more public or private investment funds. Many states are reflecting their belief in the importance of resource availability when they stress educational improvements as one of the ways to maintain healthy state economies.

While many states feel quality education is a paramount goal to retain their competitive position and quality of life, and while there are many studies that relate the educational level of the population to the ability to achieve economic growth (Edwards 1976; Kunkel 1970; Henry 1986; and Rosenfeld, Bergin, and Rubin 1985), there has not been a wealth of research addressing the relationship of public education to local growth or to the social returns from public education (McNamara, Kriesel, and Deaton 1984). Hines, Tweeten, and Redfern (1970) estimated the social returns of education at all school levels and for all race-sex groups to be 11.8 percent. Several studies have attempted to relate manufacturing location decisions to the quality of the local workforce (Kuehn, Braschler, and Shonkwiler 1979; Smith, Deaton, and Kelch 1978; Debertin, Pagoulatos, and Smith 1980; and Leuck 1979). However, the empirical results have been inconsistent and unstable. McNamara, Kriesel and Deaton suggest these results may be due to inadequate conceptual elaboration of the nature and role of human capital with respect to regional or local economic growth.

Unfortunately, with respect to many of the newer state development efforts to nurture small independent businesses, the literature is scarce. For example, with respect to venture capital, much of the literature does not address regional differences (Bean, Schiffel, and Mogel 1975; Kozmetsky, Gill, and Smilor 1985). However, this tends to be in regions with already high concentrations of financial resources and/or high concentrations of technology-intensive businesses.

There is virtually no research addressing the role of venture capital in influencing high technology location, but it is known that venture capital is distributed very unevenly across regions. California, New York, and Massachusetts account for approximately 60 percent of the total venture capital pool. While these states "export" venture capital elsewhere, the largest number of investments go to highly urbanized areas. Venture capital investments in total tend to be made in seven states: New York, Massachusetts, Connecticut, California, Illinois, Minnesota, and Texas (Florida and Kenney 1986).

It may be that the potential for regions to use venture capital networks is limited at best. Perhaps the most successful example of public equity provision is the Massachusetts Technology Development Corporation. The corporation finances companies in an area that already receives a disproportionate share of private venture capital resources. It already is doubtful that simply providing public venture capital can compensate for

the absence of a well-developed technology infrastructure such as would be the case in a lagging region (Florida and Kenney).

In addition to educational and venture capital investments, many development programs have emphasized increasing resource availability by developing natural resources. For example, many of the early, large rural development programs, such as the Tennessee Valley Authority (TVA), were based on the belief that increasing availability of natural-based resources (e.g., water, power, agricultural land, and fertilizers) was the key to regional development (Chandler 1984). However, in a comprehensive review of eleven southeastern, county-level studies of the role of natural resources and resource investments on employment income and economic structure, Jansma (1976) concluded such investments are not significant generators of rural growth. In his study of the Tennessee Valley Authority, Chandler concluded the tremendous successes in development ascribed to the existence of TVA were a "myth." Many critics question these conclusions as to the role of resources, however, suggesting that what is important is the relationship of natural resources to technology (Abramovitz 1961), the access to trade of natural resources (Herfindahl 1966), or quality and multipurpose nature of natural resources (Back 1969).

Increasingly, natural resources—particularly as amenities—are seen as job-enhancing. Mark Henry (1986) concludes:

> Enhanced quality of public services and improvements in environmental and cultural amenities may be more effective in ultimately maintaining a state employment base than the current emphasis on industry hunting.

Wheat (1986) also has shown that regional manufacturing growth is avoiding regions with harsh cold climates and that retirees—an important component of growth in some rural counties—almost exclusively locate near lakes, sea coasts or mountains.

Resources also can include public funds; there is evidence, for example, that federal aid programs can lead to growth. Martin and Graham (1980) found, for example, that Economic Development Administration funds to counties led to significant improvements in personal income growth rates during the period of aid receipt. Barrows and Bromley (1975) found that Economic Development Administration Public Works Projects had greater job creation impacts in less populated areas than in urbanized areas. On the other hand, Stutzer (1985) found that state issued revenue bonds have had little or no impact on statewide employment; he suggests such funds might be better targeted to worker training.

Advancing Technology

Advancing technology refers to investing in research and development, developing new and improved products and services, or improving human

resources through job training. Those advocating advancing technology as a way of achieving regional growth focus on productivity increases—of labor and of capital. In that sense, "advancing technology" as a basis for regional growth can be aligned closely with the "increasing resource availability" basis. That is, educational investments might simultaneously improve labor productivity and increase the availability of the appropriate "quality" of labor for regional growth.

Hulten and Schwab (1984) provide an example of research that addresses advancing technology. In a study of regional productivity growth in U.S. manufacturing from 1951 to 1978, they found total productivity was an important source of regional growth. However, they also concluded that since labor productivity growth between the Sun Belt and Snow Belt states were essentially the same, "productivity differentials are not responsible for differences in regional growth" from 1965 to 1978. Instead, they found interregional differences were largely a result of differences in the growth or either capital or labor, that is, of "increasing resource availability." This conclusion is supported by the comprehensive work of Jorgensen and Griliches (1967) who found that growth in total inputs used—and not growth in the productivity of these inputs—was by far the major determinant of growth in total output.

Many times the evidence as to the importance of advancing technology is anecdotal. For example, many believe universities influence the local business environment by providing a focus for experimentation, and by the university-attracted establishment of local firms characterized by high technology. This relationship has occurred in other states. For example, the Massachusetts Institute of Technology (MIT) is surrounded by one square mile that has outperformed each of thirteen states in terms of job creation since 1980 (Hyatt 1987). While MIT is a "world-class" university and therefore a special case, this phenomenon of technology investment is thought to occur around other universities, albeit in a lesser way.

From a state's perspective, investments in either research and development or human skills can be risky if such investments can not be recaptured within the state. That is, if either people or the benefits from new or improved products leave the state, then states are likely to restrict investment in these value-increasing activities (Otto and Johnson 1987). Holtmann (1966) found that communities tend not to provide education for which they perceive they will not be reimbursed through future economic growth. Furthermore, Luytjes's research (1971) on low income Kentucky communities, found that because of limited local employment opportunities, increased education did lead to increased migration. Despite these concerns, however, the policy implication of advancing technology as a basis for regional growth has been well reflected in federal and state efforts to invest in research and development, to modernize plants, to provide skill training, or otherwise improve productivity.

Expanding Markets

Expanding markets focuses on new sources of demand for a region's goods and services. The fundamental premise is that the economic base of a region depends on "export markets," where "exports" are those goods and services sold outside the boundaries of the region. Export markets are thought to be the prime determinant of the economic health of a region (North 1955). Expanding markets can be accomplished by regions specializing and trading with other regions, by increasing the exports from and reducing imports into the region, or by stimulating demand for various local business products and services from within and without the region.

Many regions that are particularly dependent on natural region-based industries—agriculture, forestry, or mining—have tended to rely on this method of achieving growth. Several studies support the conclusion that expanding markets are a major determinant of industrial location (McLaughlin and Robock 1949; Thompson and Mattila 1959; Lichtenberg 1960; Chintz and Vernon 1960; Perloff *et al.* 1960; Perloff and Dodds 1963; Fantus 1966; and Wheat 1986). There is less evidence on successful and effective regional strategies to expand markets. That is, it is reasonably clear that if a region can increase demand for its products, growth will follow; it is less clear which strategies successfully increase demand.

States have pursued expanding markets by promoting increased within-state purchases of state products (e.g., "buy locally grown produce" campaigns), by encouraging increased purchases of state products by out-of-state consumers, or by urging direct foreign purchases of state products. For example, with respect to foreign purchases of state products, states spent almost $19 million on export promotion in 1980. Virginia, Ohio, Maryland, and Illinois spent over $1 million each. Research shows, on average, that a 1 percent increase in state foreign export promotion expenditures will generate a .044 percent increase in manufactured exports (Coughlin and Cartwright 1987).

Conquering Geographic Space

Conquering geographic space focuses on the role spatial relationships have to regional growth. Conquering space as a determinant of economic growth has been well documented, particularly in what have been termed "location theory" studies. Location theory usually focuses on the role of the location of resources, markets, and transportation services in determining the location of economic activity (Edwards 1976 and Isard 1956). While much of the research with respect to conquering geographic space has been used to explain and describe past growth patterns, the knowledge gained can be used for policy recommendations with respect to achieving "agglomeration economies." These are cost savings from locating related businesses and residences close to one another and to their markets as well as from planning the placement of public roads, telecommunication

systems, and other services. For example, Smith and Redfield (1987) note that Freeport, Maine has used the existence of the mail-order business of L.L. Bean to develop an impressive retail center. Firms located in Freeport gain the advantages of being close to similar types of businesses.

The newest method to counteract distance is telecommunications. Some argue telecommunications might make rural areas more competitive since distance is less important (Smith and Redfield 1987). McGranahan, Hession, Hines, and Jordan (1986) believe the telecommunications case is easily overstated. They argue that proximity offered by central locations remains essential; location is not irrelevant. This is most evident in the information industry itself, as in the dramatic growth of Silicon Valley. "In situations of volatile markets and technology, face-to-face contacts apparently cannot be replaced."

"Conquering space" is particularly important to remote areas and is frequently accomplished by out-commuting as workers respond to the lack of opportunities in their own community. Mitchelson and Fisher (1987) argue the key to understanding "counter urbanization" or the choice of rural residence is to understand long distance commuting, "the journey to work." In their study of commuting patterns within Georgia, they concluded that a "complex commuting system is in part responsible for those rural areas once losing population now functioning as growth areas." In Georgia, Mitchelson and Fisher also found that the commuting patterns were to nonmetropolitan growth centers as well as to metropolis.

Therefore, "conquering space" can require access to good, low-cost infrastructure. The close proximity of an interstate highway, for example, has proven to be a good predictor of growth; a number of studies have found highways important determinants of economic success (e.g., Carlino and Mills 1987; Henry, Drabenstott, and Gibson 1987; Young 1986; Rosenfeld, Bergen, and Rubin 1985; Moon 1987; and Briggs 1983).

Two alternative bodies of thought with respect to conquering geographic space involve appropriate location of firms to influence regional growth: the "trickle down" and the "trickle-up" theory. The thought behind the "trickle down" theory is that accelerating growth in the less rural centers ultimately will provide jobs for neighboring, more rural areas (Edwards 1976). The "trickle down" theory has influenced many agencies to experiment with "growth centers," usually with the assistance of Economic Development Administration funds.

The "trickle-up" concept advocates placing manufacturing plants in rural regions and relying on modern communication and transportation to overcome any economic disadvantages associated with remote locations. A 1972 doctoral dissertation by Barrows concluded rural development projects "should *not* necessarily be centered in large urban growth centers" (defined as 250,000 population or more). Barrows and Bromley (1975) found projects that were most successful in creating jobs were those in counties that already were experiencing rapid growth in income and pop-

ulation and in which population was concentrated in towns of 2,500 to 24,999. Their findings thus supported the "trickle-up" idea. Earlier, however, Hansen (1970) had questioned the report of the President's Advisory Committee on Rural Poverty because it advocated bringing industry to remote rural areas. He felt there was no evidence that government could be successful and instead advocated federal subsidies and information programs to facilitate immigration to "intermediate" regions where rapid growth existed but where congestion posed little threat. Jansma (1976) questions whether such a place exists, but he does not criticize the conclusion that assisting immigration may be a preferred policy to industrial recruitment for rural areas. Nevertheless, several studies have found that remoteness from a large community did not significantly influence the chances of community growth (Young 1986; Rosenfield, Bergman, and Rubin 1985; and Jansma and Goode 1976).

Building Institutions

Building institutions (e.g., organizations, markets, and laws) refers to the need to develop new institutions to encourage and sustain growth. Edwards (1976) notes institutional building is a basis for growth in two ways. The first is that it facilitates the other four bases of growth. Examples include financial institutions to provide venture capital or job training institutions to improve labor productivity; computer-based buying and selling of goods or services to expand markets (electronic markets); or zoning regulations to influence spatial location. The second way involves institutions that function independently of the other four bases. These include institutions for regional or local planning, community development committees, identification and cultivation of local leaders, and the delivery of public goods such as health care.

Carlino and Mills (1987) and Young (1986) used institutional variables in their analyses of total employment (e.g., whether the state was a "right-to-work" state), state cumulative use of Industrial Development Bonds, and percent of unionization in the state workforce. These were not significant variables when the model results were obtained, however. Wheat (1986) also used union participation, "right-to-work" laws, and taxes. He found they were not significant variables. Other studies have found either the "right to work" laws or a business climate index, which includes percentage of unionization to be insignificant in explaining business location in interregional studies (Carlton 1979; Carlton 1983; and Newman 1983). Others have found these to be significant (Plaut and Pluta 1983; and Bartik 1985). However, because unionization is more heavily represented in the northeast states, these variables may be reflecting geographic differences in growth unless the model carefully controls for regional disparities other than unionization.

Several studies convinced most regional analysts that tax policies have had little effect on differences in regional growth. The most influential study was that of Due (1961). More recent studies (Charney 1983; Newman 1983; Bartik 1985; Fox 1981; Wasylenko 1980; and Wasylenko and McGuire 1985) have found that in intra-urban areas, relative tax rates can influence business activity. It may well be that firms are more concerned about the level and quality of services they obtain per tax dollar as opposed to the amount of taxes paid; however, there are no recent studies that focus on the role of tax policy on industrial location from a nonmetropolitan versus metropolitan focus.

Macroeconomic Forces and the Five Bases of Growth

Edwards' classification of the literature on determinants of rural development into five major components reflects the fact that little if any of the literature addresses all five components simultaneously (Jansma and Goode 1976). The common organizational theme throughout much of the literature, however, is "spatial profit maximization." That is, entrepreneurs will locate where they expect to make the most profit (Jansma and Goode 1976).

Excluded from the Edwards framework is the impact of macroeconomic forces. While the five bases for economic growth explain some of the economic growth differences between regions, the overall level of economic activity in rural regions in the United States has been strongly influenced by macroeconomic forces. Macroeconomic influences include changes in the strength of the American dollar and thus in trade patterns and declining demands for mining, farming, and manufacturing products. Therefore, the five bases of growth identified by Edwards should explain why one region or community was successful while another was not, despite both being influenced by the same set of macroeconomic forces. Of course, the same set of macroeconomic forces can and do have differential effects on different regions or different sectors of the economy. Recently, macro and aggregate forces have brought major structural change in many rural areas. Four examples of the differential regional and sector effects of macro and aggregate sources illustrate the importance of these factors.

First, imbalances in the federal budget deficit and the trade deficit have had a pronounced impact on the rural economy. Rural sectors are concentrated in the production of tradables—goods and services that either are or could be traded internationally—producing relatively less nontradables (especially services) than the country as a whole. The revaluation of the dollar in the early 1980s caused a shift in the price of tradables relative to the price of nontradables, lessening the incentive for exporting and increasing the incentive for importing and for the production of nontradables (Adelman and Robinson 1987). Rural manufacturing, for example, includes

many jobs particularly sensitive to competition from imports. Over 30 percent of all rural manufacturing jobs were in apparel, textiles, wood products, leather, and shoes (Brown and Deavers 1986).

Second, the recession in farming also has hit hardest in the North Central region, particularly the Great Plains. The farm dependent regions are specialized and tend to lack the resiliency to respond to economic declines. Of the farming-dependent counties, 46 percent have no incorporated towns of 2,500 or more people, nor are they adjacent to a Standard Metropolitan Statistical Area (SMSA) (Bender *et al.* 1985). Nonfarm employment can be difficult to obtain. In several midwest states, counties obtain their income from both agricultural and mining uses of their resources. Because the mining industry also is seriously depressed, states such as North Dakota, Oklahoma, and Texas are experiencing severe unemployment and recessions in both of their major rural industries.

Third, while most of the basic industries in the United States have declined in the 1980s, the service industry has been robust. Unfortunately for rural areas, they are at a disadvantage in the conversion to a service-based economy. They are in danger of being left behind as the national economy makes the shift toward services. For example, service jobs were about 15 percent of total rural employment at the end of 1984, compared with 22 percent of total urban employment (Henry, Drabenstott, and Gibson 1987). Seven out of every eight new service jobs in the economy in 1984 were added in metropolitan areas. Only in those rural counties that specialized in retirement or government activities were the percentage increases in service jobs greater than in metropolitan areas.

Finally, deregulation of transportation, banking, and the communication system also have worked to the disadvantage of rural areas (Pulver and Rodgers 1986). Federal regulation has, in essence, represented a subsidy of low-priced rural power, transportation, and telephone service and thus, an important component of rural development as deregulation proceeds (Richards 1987). Low-volume, low-profit routes and rural markets are left unserved or are served at higher rates. Rural communities, particularly in the midwest, are placed at an economic disadvantage.

Explaining and Predicting Growth

The five bases of growth provide valuable insights into the processes of growth, though there is no one encompassing theory that integrates them. Indeed, there are many skirmishes among theorists as to which of the five explanations of growth is the more important. Government programs have proceeded by implementing policies that draw their rationale from one or another of the five bases; but, these programs often lack integration.

A comprehensive theory adequately encompassing all five bases of growth is not available. We understand parts of the development process under certain conditions, but the complete process of growth remains an

enigma. We are much better at explaining past growth patterns than we are at predicting future ones or at ameliorating rural decline. As Newman (1987) states:

> Just as diversification is not a cure and specialization a curse, so too is access or infrastructure or enterprise zones or venture capital alone not the answer. The things we do not know about the development process confirm the belief that development is a complex web of the tangible and intangible. It consists of the interaction of what are customarily identified as economic factors with a host of cultural, and social, attitudinal forces which distinguish individuals and areas from each other. The very complexity of the process should warn us against attempts to expect rapid results from the most well-meaning and well-structured programs. Impacts of programs are usually incremental over time and diffused. One easy fix never works. In addition, the range of events that impact on the fortunes of an area are so large that we should not be surprised by a statistical or even conceptual inability to isolate the impact of any set of public actions on the goal-oriented measures of income, employment, or population change.

Despite the inexact nature of the rural development theories, they provide insights as to what are important factors influencing growth. While not providing a road map for achieving development success, the theories focus attention on sets of key attributes associated with growth and provide implications for policy design.

APPENDIX B. A MODEL FOR PREDICTING EMPLOYMENT CHANGE IN THE RURAL FARM BELT: MODEL SPECIFICATIONS AND RESULTS

TABLE B-1. LIST OF VARIABLES

Variable	*Description*	*Source*	*Mean*	*Standard Deviation*
Employment change	Percent change in wage and salary employment	BEA*	−2.107%	10.256
Federal development spending	Average per capita federal spending on development programs, 1975 and 1980, in 1979 dollars	ERS**	$416.77	502.77
County population	1980 Total county population	1980 Census	14,151	12,279
% With more than high school education	1980 Percent of county population over 25 with more than 12 years of education	1980 Census	24.6%	6.5
Family income	1979 Median family income	1980 Census	$15,671	2649
% Commuters	Percent of commuters	1980 Census	14.30%	10.46
% Farm-related employment	1980 Employment: farm workers, agricultural services, food and kindred industries, tobacco, leather (not farmers)	BEA*	13.03%	9.4
% Mining and energy employment	1980 Employment: mining and energy-extractive industries	BEA*	2.48%	5.82

% Manufacturing	1980 Employment: manufacturing (not including farm-related, mining, or energy)	BEA*	8.86	9.51
Business cycle	Ratio of % change in state employment/ % change in national employment	BEA	.851	.180
Adjacency	Adjadency to metro area (physically adjacent, commutable, and over 2% commuting)	ERS	128 yes	420 no
State University	Presence of 4-year state university	ERS	34 yes	514 no
Interstate highway	Presence of interstate highway in 1970 or proposed in 1970	ERS	127 yes	421 no

NOTES: *Special ERS tabulation of 1969–1984 Bureau of Economic Analysis (BEA) employment statistics at the 2-digit SIC level.**ERS data: Includes loans for business assistance, community development infrastructure, health and hospital construction, and housing; grants for infrastructure, business assistance, regional development (EDA, CDBG, UDAG), transportation, and housing; and general revenue sharing.

TABLE B-2. Model Results: Factors Influencing Rural Midwest County Percent Employment Growth Rates, 1979–1984

Variable	*Estimated Coefficient on Variable*	*Standard Error of Coefficient*
1975 Federal spending on development programs	.000292	.000894
1980 Employment in agriculture	.039366	.050288
1980 Employment in manufacturing	.006170	.057185
1980 Employment in mining	.024615	.079172
1980 Total county population	−.000030	.000050
Presence of 4-year state university	−1.746803	2.133097
1980 Percent of county population over 25 years with more than high school education	−.016750	.102699
Adjacency to metro area	−.320825	1.120516
National business cycle	4.266808	.551114*
Dependency variable	−30.804570	6.547021*
1979 Median family income	−.000009	.000228
Percentage of commuters	.090777	.047661*
Presence of interstate Highway	−.727587	1.000158
(Constant Term)	21.906143	7.984967*
Adjusted R^2 = .17		

*NOTE: Indicates significant at 5 percent level. The model was specified as a linear, ordinary least-squares regression. No transformations were performed on any of the variables.

APPENDIX C. FIELD RESEARCH METHODS

Selecting Counties for Intensive Study

The statistical analysis described in Chapter Two and Appendix A identified forty "high-growth" rural counties. Of these, half could attribute their employment growth to the impact of a singular, external force such as:

Commuting to major metro areas. In five Missouri counties, employment growth was predominantly the result of workers commuting from rural areas to jobs in major metropolitan areas such as St. Louis, Springfield, or Jefferson City.

Oil and gas exploration and drilling. In three Kansas counties, four North Dakota counties, and three Oklahoma counties, the employment growth that occurred from 1979 to 1984 was a direct result of the boom in oil and gas exploration and drilling. All of these "energy counties" have since experienced severe declines in employment.

Large-scale construction projects. In one Oklahoma county, one Kansas county, and four Nebraska counties, there were various kinds of large-scale construction projects that caused temporary increases in employment. These projects included a nuclear power plant, two Bureau of Reclamation dams, and state highway construction. In the county where the nuclear power plant was built, employment has since dropped below its 1979 level. Significant employment losses also are occurring in counties where construction projects are close to completion.

Although such forces were the most common source of employment growth in the top forty counties, they also are the least interesting in terms of uncovering successful approaches.

In eight counties identified by the model, employment growth could be attributed to a tourist trade intertwined with an influx of sizable retired populations. Six of these tourism/retirement counties were located in Missouri, with the seventh in eastern Kansas. Both the tourist trade and the retirement phenomenon in these counties is associated with large, man-made lakes, and more specifically with housing developments on the lake fronts.

Eight of the top forty growth counties identified by our model achieved more broad-based employment growth as a result of some sort of industry-led diversification.[1] These counties are particularly interesting for two reasons. First, their growth is broadly based and promises to be sustainable. Second, because their growth is not dependent on a singular, external force, it is more likely to provide insights for communities trying to duplicate their success.

Field Methods Used to Investigate the Top Forty Counties

The procedure used to conduct the field research was divided into four parts:

- Formulating the interview questions;
- Gathering information on top 40 counties;
- Selecting counties for on-site interviews; and
- Identifying local players to interview.

Formulating the interview questions. The interview included questions about sources of local employment growth and the possible causes underlying that growth.

Gathering information on the top forty counties. The counties were investigated state-by-state in the following order: Iowa, Missouri, Kansas, South Dakota, North Dakota, Nebraska, and Oklahoma.

University extension specialists were interviewed about reasons for employment growth in their respective counties. Community development specialists were especially knowledgeable, and thus able to provide the names and telephone numbers of contact people at the local level. (In Missouri, these specialists set up a schedule of interviews in all four counties visited.)

Staff of state agencies responsible for administering economic development programs and initiatives (e.g., departments of economic development and commerce) also were interviewed about reasons for employment growth in that state's top-performing county(ies), about counties that experienced employment gains after 1984, and about persons to contact at the local level.

If the necessary names and information were available from university extension specialists and/or state agency staff, local individuals were contacted to verify reasons for employment growth, identify key players in the community's and/or county's economic growth, and identify growing businesses and industries.

If information about the state's top-performing county(ies) was not available from these individuals, chambers of commerce and local newspaper editors were found to be excellent sources of information at the local level.

Selecting counties for the on-site interviews. Based on the information gathered above, counties were eliminated where employment growth from 1979 to 1984 was a result of one of the following circumstances:

- Thirty percent or more of the county's employed were commuting to jobs in a nearby metro area (five counties);
- A temporary boom in oil and gas exploration and drilling (ten counties);

- One-time large-scale construction projects such as nuclear power plants, Bureau of Reclamation dams, and state highways (six counties);
- Changes in reporting of employment data (one county); and
- Miniscule employment gains in extremely small populations (two counties).

This process of elimination left us with no counties in North Dakota, South Dakota, and Oklahoma; one county in Iowa; one county in Nebraska; five counties in Kansas; and nine counties in Missouri.[2]

We then asked economic development agencies in each state to identify any counties that showed employment gains after 1984. The results were one additional county in Iowa, three in North Dakota, and four in Missouri.[3]

Identifying local players to interview. Most of this was accomplished during the process of gathering information on the top forty counties. Local contacts were used to identify key players in a community's economic growth, and as many on-site interviews as possible were set up with these local leaders. Examples of contacts and key players at the local level included:

- Business/industry owners/operators
- Real estate developers
- Bankers
- Newspaper editors
- Public or private utility executives
- Chamber of commerce executives
- Officials of local development corporations or industrial development authorities
- City or county directors of economic development
- Mayors
- Community college faculty
- Area extension specialists

A list of additional counties identified by the states follows.

Additional Counties Identified by State Departments of Economic Development

County	*Percentage Increase in Employment, 1984-1986*
Clarke, Iowa	3.5
Macon, Missouri	15.1
Crawford, Missouri	7.0
Audrain, Missouri	0.7
Perry, Missouri	8.4
Barnes, North Dakota	4.0
Richland, North Dakota	0.5
Rolette, North Dakota	4.7

APPENDIX C ENDNOTES

1. In addition to these, state departments of economic development were able to identify eight more counties that have had employment gains since 1984 related to industry-led diversification. Thus, the findings discuss both the original eight "high-growth" counties and these "new" counties.
2. Because Missouri had so many growth counties, it was handled differently. Even though five commuter counties were eliminated at the outset, nine remained to be investigated. Of those, seven turned out to have some mix of tourism/ retirement-related growth. One of these tourism/ retirement counties, the two remaining counties which appeared to have a broader mix of economic activity, were visited. The Missouri Department of Economic Development also suggested four additional counties that achieved employment gains after 1984; one of these also was selected for an on-site visit.
3. Half a dozen additional counties were suggested by the Nebraska Department of Economic Development, but the state's employment data revealed that all of them had experienced employment declines.

BIBLIOGRAPHY

Abramovitz, Moses. "Connections Between Natural Resources and Economic Growth." In *Natural Resources and Economic Growth*, edited by J.J. Spengler. Washington, D.C.: Resources of the Future, 1961, pp. 9-16.

Adelman, Irma, and Sherman Robinson. "Macroeconomic Shocks, Foreign Trade, and Structural Adjustment: A General Equilibrium Analysis of the U.S. Economy, 1982-86." Giannini Foundation Paper #839, California Agricultural Experimental Station, July 1987.

Advisory Commission on Intergovernmental Relations. *The States and Distressed Communities: The Final Report*. Washington, D.C., November 1985.

Back, W. Burl. "Estimating Contributions of Natural Resources Investments to Objectives in Regional Economic Development." *American Journal of Agricultural Economics*, vol. 51 (December 1969), pp. 1442-48.

Barrows, Richard. "Regional Economic Development and the Public Sector: An Economic Analysis of the Economic Development Administration's Public Works Projects." Unpublished doctoral thesis, University of Wisconsin, 1972.

Barrows, Richard L., and Daniel W. Bromley. "Employment Impacts of the Economic Development Administration's Public Works Program." *American Journal of Agricultural Economics*, vol. 57, no. 1 (February 1975), pp. 46-54.

Bartik, Timothy. "Business Location Decisions in the U.S.: Estimates of the Effect of Unionization, Taxes and Other Characteristics of State." *Journal of Business and Economic Statistics*, vol. 3, no. 1 (1985), pp. 14-22.

Bean, Alden, Dennis Schiffel, and Mary Mogel. "The Venture Capital Market and Technological Innovation." *Research Policy*, vol. 4 (1975), pp. 380-408.

Bender, Lloyd D., Bernal L. Green, Thomas F. Hady, John A. Kuehn, Maryls K. Nelson, Len B. Perkinson, and Peggy J. Ross. "The Diverse Social and Economic Structure of Nonmetropolitan America." U.S. Department of Agriculture, Economic Research Service Report #49. Washington, D.C.: Government Printing Office, September 1986.

Biehl, Dieter. "Determinants of Regional Disparities and the Role of Public Finance." *Public Finance*, vol. 35 (1980), pp. 44-71.

Briggs, Ronald. "The Impact of the Interstate Highway System on Nonmetropolitan Development, 1950-80." In *Beyond the Urban Fringe*, by Rutherford H. Platt and George Machinko. Minneapolis: University of Minnesota Press, 1983, pp. 83-105.

Brown, David L., and Kenneth L. Deaver. "The Changing Content of Rural Research and Policy." U.S Department of Agriculture, Economic Research Service, unpublished paper, 1986.

Bryant, W.K. "Industrial-Urbanization and the Spatial Distribution of Income in Agriculture." In *Income Distribution Analysis*, edited by W.B. Back, D.M. Hoover, and J.A. Martin. North Carolina State University, Agricultural Policy Institute, API Series 23 (1966), pp. 139-52.

Carlino, Gerald, and Edwin S. Mills. "The Determinants of County Growth." *Journal of Regional Science*, vol. 27, no. 1 (July-August 1987), pp. 39-54.

Carlton, O. "Why Firms Locate Where They Do: An Econometric Mode." In *Interregional Movements and Regional Growth*, edited by W. Wheaton. Coupe Paper, vol. 2. Washington, D.C.: Urban Institute, 1979.

Carlton, D. "The Location and Employment Choices of New Firms: An Econometric Model With Discrete and Continous Endogenous Variables." *The Review of Economics and Statistic*, vol. 65, no. 3 (1983), pp. 440-49.

Chandler, William U. *The Myth of TVA: Conservation and Development in the Tennessee Valley, 1933-1983*. Cambridge, Mass.: Ballinger Publishing Co., 1984.

Charney, Alberta. "Intraurban Manufacturing Location Decisions and Local Tax Differentials." *Journal of Urban Economics*, vol. 14, no. 2 (September 1983), pp. 184-205.

Chintz, Benjamin, and Raymond Vernon. "Changing Forces in Industrial Location." *Harvard Business Review*, vol. 38 (1960), pp. 126-36.

Clarke, Marianne K. *Revitalizing State Economies*. Washington, D.C.: National Governors' Association, 1986.

Committee for Economic Development, Research and Policy Committee. *Leadership for Dynamic State Economies*. New York: Committee for Economic Development, 1986.

Coughlin, Cletus C., and Phillip A. Cartwright. "An Examination of State Foreign Export Promotion and Manufacturing Exports." *Journal of Regional Science*, vol. 27, no. 3 (1987), pp. 439-49.

Debertin, David L., Angelos Pagoulatos, and Eldon D. Smith. "Estimating Linear Production Functions: A Comparison of Approaches." *Southern Journal of Agricultural Economics*, vol. 12 (1980), pp. 65-69.

de Silva Costa, Jose, Richard W. Ellson, and Randolph C. Martin. "Public Capital, Regional Output and Development: Some Empirical Evidence." *Journal of Regional Science*, vol. 27, no. 3 (1987), pp. 419-37.

Due, John. "Studies of State-Local Tax Differences on the Location of Industry." *National Tax Journal*, vol. 14 (June 1961), pp. 163-73.

Eberts, Randall W. "Estimating the Contribution of Urban Public Infrastructure to Regional Growth." Working Paper #8610, Federal Reserve Bank of Cleveland, December 1986.

Eberts, Randall W. "The Role of Public Investment in Regional Economic Development." Paper presented at the Association for Public Policy Analysis and Management, Washington, D.C., October 15, 1985.

Edwards, Clark. "The Bases for Regional Growth: A Review." In *A Survey of Agricultural Economic Literature*, vol. 3, edited by Lee R. Martin. Minneapolis: University of Minnesota Press, 1981.

Edwards, Clark. "The Political Economy of Rural Development: Theoretical Perspectives." *American Journal of Agricultural Economics*, vol. 58, no. 5 (December 1976), pp. 914-21.

Ehrlich, Everett M., and Raymond C. Scheppach. *New Directions in Economic Policy: An Agenda for the 1980s*. New York: Praeger Publishers, 1984.

Fantus Company Inc. "The Appalachian Location Research Studies Program: Summary Report and Recommendations." Washington, D.C.: Appalachian Regional Commission, 1966.

Florida, Richard L., and Martin Kenney. "Venture Capital, High Technology and Regional Development." Revised version of a paper presented at the annual meeting of the Regional Science Association, Ohio State University, Columbus, Ohio, November 1986.

Fox, William. "Fiscal Differentials and Industrial Location: Some Empirical Results." *Urban Studies*, vol. 18 (February 1981), pp. 105-11.

Gittell, Ross, and Nancy J. Kelley. "A Framework for Community Revitalization: Managing Change Through Innovation at the Local Level." Community Revitalization Project, Center for Business and Government, Harvard University, 1987, unpublished.

Gittell, Ross, and Nancy J. Kelley. "A Tale of Three Cities: New Approaches to the Revitalization of Our Depressed Industrial Communities." Community Revitalization Project, Center for Business and Government, Harvard University, September 1987, unpublished.

Goode, Frank M., and J. Dean Jansma. "Planning for Rural Development: Indicators of Needs and Potentials in Pennsylvania." Pennsylvania State University, Department of Agricultural Economics and Rural Sociology, No. 116, April 1975.

Hansen, Niles. *Rural Poverty and the Urban Crisis*. Bloomington: University of Indiana Press, 1970.

Helms, L. Jay. "Effect of State and Local Taxes on Economic Growth: A Time Series-Cross Section Approach." *Review of Economics and Statistics*, vol. 67, no. 4 (November 1985), pp. 574-82.

Henry, Mark S. "Agriculture's Stake in Rural Economic Development." *Northeastern Journal of Agriculture and Resource Economics*, vol. 15, no. 2 (October 1986), pp. 75-85.

Henry, Mark, Mark Drabenstott, and Lynn Gibson. "A Changing Rural America." *Economic Review*. Kansas City: The Federal Reserve Bank, July-August 1987.

Herfindahl, Oris. *Natural Resource Information for Economic Development*. Baltimore: The Johns Hopkins Press, 1966.

Herzog, Henry W., Alan M. Schlottmann, and Donald L. Johnson. "High-Technology Jobs and Worker Mobility." *Journal of Regional Science*, vol. 26, no. 3 (August 1986), pp. 445-60.

Hines, Fred, Luther Tweeten, and Martin Redfern. "Social and Private Rates of Return to Investment in Schooling by Race-Sex Groups and Regions." *Journal of Human Resources*, vol. 5 (1970), pp. 318-40.

Hirschman, Albert O. *The Strategy of Economic Development*. New Haven, Conn.: Yale University Press, 1958.

Holtmann, A.G. "A Note on Public Education and Spillovers through Migration." *Journal of Political Economy*, vol. 74 (1966), pp. 524-25.

Hulten, Charles R., and Robert M. Schwab. "Regional Productivity Growth in U.S. Manufacturing: 1951-78." *American Economic Review*, vol. 74, no. 1 (March 1984), pp. 152-62.

Hyatt, Joshua. "Coast to Coast." *Inc. Magazine*, October 1987, p. 76.

Isard, W. *Location and Space-Economy: A General Theory Relating to Industrial Land Use, Trade and Urban Structure*. Cambridge, Mass.: MIT Press, 1956.

Jansma, J. Dean. "Measuring the Impact of Natural Resource Investments on Employment, Income, and Economic Sources Structure." S-71 Regional Research Project Report. *Southern Cooperative Bulletin*. Mississippi Agricultural and Forestry Experiment Station, Mississippi State University, 1976.

Jansma, J. Dean, and Frank Goode. "Rural Development Research: Conceptualizing Key Concepts." *American Journal of Agricultural Economics*, vol. 58, no. 5 (1976), pp. 922-28.

John, DeWitt. *Shifting Responsibilies: Federalism in Economic Development*. Washington, D.C.: National Governors' Association, 1987.

Jorgensen, Dale W., and Zri Griliches. "The Explanation of Productivity Change." *Review of Economic Studies*, vol. 34 (July 1967), pp. 249-83.

Kozmetsky, George, Michael Gill, and Raymond Smilor. *Financing and Managing Fast-Growth Companies: The Venture Capital Process*. Lexington, Mass.: Lexington Books, 1985.

Kuehn, John A., Curtis Braschler, and J. Scott Shonkwiler. "Rural Industrialization and Community Action: New Plant Locations Among Missouri's Small Towns." *Journal of the Community Development Society*, vol. 10 (1979), pp. 95-107.

Kunkel, John H. *Society and Economic Growth: A Behavioral Perspective of Social Change*. New York: Oxford University, 1970.

Lawrence, Sharon. "Selected State Legislative Rural Development Initiatives." Washington, D.C.: National Conference of State Legislatures, July-August 1987.

Leuck, Dale J. "An Econometric Model of Manufacturing Employment Growth in Rural Tennessee Counties from 1962 to 1976." *Southern Journal of Agricultural Economics*, vol. 11 (December 1979), pp. 63-67.

Lichtenberg, Robert M. *One-Tenth of a Nation*. Cambridge, Mass.: Harvard University Press, 1960.

Liner, Blair, and Larry Ledebur. *Foreign Direct Investment in the United States: A Governor's Guide*. Washington, D.C.: National Governors' Association, Committee on International Trade and Foreign Relations, 1987.

Luytjes, Jan B. "Appalachian Brain Drain: Note on the Impact of Increased Educational Funds in Laggin Areas." *Growth and Change*, vol. 2 (1971), pp. 38-41.

Martin, Randolph C., and Robert E. Graham Jr. "The Impact of Economic Development Administration Programs: Some Empirical Evidence." *The Review of Economics and Statistics*, vol. 62, no. 1 (February 1980), pp. 52-62.

McGranahan, David A., John C. Hession, Fred K. Hines, and Max F. Jordan. *Social and Economic Characteristics of the Population in Metro and Nonmetro Counties, 1970-80*. Washington, D.C.: U.S. Department of Agriculture, Economic Research Service, 1986.

McLaughlin, Glen E., and Stefan Robock. "Why Industry Moves South." Washington, D.C.: National Planning Association, 1949.

McNamara, Kevin T., Warren D. Kriesel, and Brady J. Deaton. "Education as an Investment in Human Capital and Manufacturing Employment Growth." Special paper 84-4. Blacksburg, Va.: Virginia Polytechnic Institute and State University, Department of Agricultural Economics, February 1984.

Mera, Koichi. Income Distribution and Regional Development. Japan: University of Tokyo Press, 1975.

Miller, James P. "Interstate Highway: Influencing Rural Jobs?" *Rural Development Perspectives*. Washington, D.C.: U.S. Department of Agriculture, March 1980, pp. 35-36.

Miller, James P. "Recent Contributions of Small Businesses and Corporations to Rural Job Creation." Washington, D.C.: U.S. Department of Agriculture, Economic Research Service, February 1987.

Miller, James P., and Herman Bluestone. "Prospects for Service Sector Employment Growth in Nonmetro America." In *Rural Economic Development in the 1980s: Preparing for the Future*. Washington, D.C.: U.S. Department of Agriculture, Agriculture and Rural Economy Division, 1987.

Mitchelson, Ronald J., and James S. Fisher. "Long Distance Commuting and Population Change in Georgia, 1960-80." *Growth and Change*, vol. 18, no. 1 (Winter 1987), pp. 44-65.

Moon, Henry E., Jr. "Interstate Highway Interchanges Reshape Rural Communities." *Rural Development Perspectives*. Washington, D.C.: U.S. Department of Agriculture, October 1987, pp. 35-38.

National Governors' Association. *Jobs, Growth, and Competitiveness*. Washington, D.C.: National Governors' Association, 1987.

National Governors' Association and National Association of State Budget Offices. *Fiscal Survey of the States 1987*. Washington, D.C.: National Governors' Association and National Association of State Budget Officers, March 1987.

Newman, Robert J. "Industry, Migration, and Growth in the South." *Review of Economics and Statistics*, vol. 65 (1983), pp. 76-86.

Newman, Monroe. "Diversification: An Iconoclastic View." In *Coping with Change: Rural America in Transition*, by the U.S. Senate Committee on Governmental Affairs. Washington, D.C.: U.S. Government Printing Office, 1987, pp. 84-91.

North, Douglas C. "Location Theory and Regional Economic Growth." *Journal of Political Economy*, vol. 63, no. 3 (1955), pp. 243-58.

Northeast Regional Center for Rural Development. *Directory of Statewide Rural and Agricultural Leadership Programs*, edited by Daryl K. Hensley. University Park: Pennsylvania State University Press, 1986.

Northdurft, William E. *Going to Market: The New Aggressiveness in State Domestic Agricultural Marketing*. Washington, D.C.: Council of State Policy and Planning Agencies, 1986.

Osborne, David. *Economic Competitiveness: The States Take the Lead*. Washington, D.C.: Economic Policy Institute, 1987.

Osborne, David. "The New Role Models." *Inc. Magazine*, October 1987, pp. 78-89.

Otto, Daniel M., and Stanley R. Johnson. "Economic Development Strategies for Revitalizing Rural Areas of Iowa." Oakdale, Iowa: University of Iowa, Legislative Extended Assistance Group, January 1987.

Perloff, Harvey S., and Vera W. Dodds. "How a Region Grows." Washington, D.C.: Committee for Economic Development, 1963.

Perloff, Harvey S., Edgar S. Dunn Jr., Eric E. Lampard, and Richard F. Muth. *Regions, Resources and Economic Growth*. Baltimore: Johns Hopkins Press, 1960.

Plaut, Thomas R., and Joseph E. Pluta. "Business Climate, Taxes and Expenditures, and State Industrial Growth in the United States." *Southern Economic Journal*, vol. 50 (1983), pp. 99-119.

Popovich, Mark G. *State Emergency Farm Finance: Volume II*. Washington, D.C.: Council of State Policy and Planning Agencies, April 1987.

Popovich, Mark G., and Terry F. Buss. "Rural Enterprise Development: An Iowa Case Study." Washington, D.C.: Council of State Planning and Policy Agencies, 1987.

Pulver, Glen C., and Glenn R. Rodgers. "Changes in Income Sources in Rural America." Paper presented at the American Agricultural Economic Association meetings, Reno, Nevada, July 29, 1986.

Richards, Bill. "Country Blues: Deregulation Raises Prices, Cuts Services in Many Rural Areas." *Wall Street Journal*, October 5, 1987.

Rosenfeld, Stuart A., Edward M. Bergman, and Sarah Rubin. *After the Factories: Changing Employment Patterns in the Rural South*. Research Triangle Park, N.C.: Southern Growth Policies Board, December 1985.

Salvatore, Dominick. "Interregional Capital Flows and Development." *Economia Internazionale*, vol. 24 (1976), pp. 66-78.

Smith, Elden D., Brady J. Deaton, and David R. Kelch. "Location Determinants of Manufacturing Industry in Rural Areas." *Southern Journal of Agricultural Economics*, vol. 10 (1978), pp. 23-32.

Smith, Steward, and S. Redfield. "Rural Change: The State's Role." *Capital Ideas*. Washington, D.C.: National Governors' Association, February 1, 1987.

SRI International. *New Seeds for Nebraska: Strategies for Building the Next Economy*. Menlo Park, Calif.: SRI International, November 1987.

Stone, Kenneth E. "Retailing in Iowa, Past, Present, and Future." Iowa State University, n.d., unpublished paper.

Stutzer, Michael T. "The Statewide Economic Impact of Small Issue Industrial Revenue Bonds." *Quarterly Review* (Federal Reserve Bank of Minneapolis), vol. 9, no. 2 (spring 1985), pp. 2-13.

Thompson Wilbur ., and John M. Mattila. *An Econometric Model of Postwar Industrial Development*. Detroit: Wayne State University Press, 1959.

U.S. Department of Agriculture, Economic Research Service. *Rural Economic Development in the 1980s: Preparing for the Future*. Washington, D.C.: U.S. Department of Agriculture, 1987.

U.S. Department of Housing and Urban Development. *1987 Consolidated Annual Report to Congress on Community Development Programs*. Washington, D.C., 1987.

Wasylenko, Michael. "Evidence on Fiscal Differentials and Intrametropolitan Firm Location." *Land Economics*, vol. 56 (May 1980), pp. 339-49.

Wasylenko, Michael, and Therese McGuire. "Jobs and Taxes: The Effects of Business Climate on States' Employment Growth Rates." *National Tax Journal*, 38, vol. 4 (December 1985), pp. 497-511.

Wheat, Leonard F. "The Determinants of 1963-77 Regional Manufacturing Growth: Why the South and West Grow." *Journal of Regional Science*, vol. 26, no. 4, pp. 635-59.

Young, Ruth C. "Industrial Location and Regional Change: The United States and New York State." *Regional Studies*, vol. 20, no. 4 (1986), pp. 341-69.

Index

A

Adaptability to change, 73-74
Agribusiness assistance by states, 60-61
Agricultural employment changes, 2
Agriculture and Rural Economy Division, U.S. Department of Agriculture, role in building model, 12
Alaska customized initiative for rural development, 64
Auburn, Nebraska, example of outside support, 50

B

Bottom-of-cycle firms, 3
Business climate, 56-57
Business development as state customized initiative, 62-64

C

California Rural Renaissance Program, 65
Catalyzing institutional change, 74
CDBG. *See* Community Development Block Grants
Colorado initiatives in regional approach, 69
Community Development Block Grants, 40-41, 42, 63-64
Community-led initiatives for growth, 75-76
Community Preparedness Program, 65
Commuter role in employment growth, 15
Cuba, Missouri, example of local leadership, 45
Customized economic development initiatives
  approaches, 58-60
  business development programs, 62-64
  community leadership, 59, 64-66
  examples, 60-61
  rural industries, 59, 60-62

D

Dependency ratio of population as statistical variable, 16
Design of rural economic change model, 12, 21
Dodge City, Kansas
  infrastructure, 42
  leadership, 44
Duplication and fragmentation of state services, 66-67

E

Economic development
  local offices, 46, 48
  professionals, 45-46
  state and regional agencies, 46
Economic Development Administration, 15, 40
Economic distress signs, 1-3
Economic growth organizations, 46-48
Educational institutions as resource for growth, 45
Education as statistical variable, 16-17
Education levels of rural labor force, 3
Elected officials as factors in growth, 44-45
Employment changes in rural areas, 2, 7-9, 11

Employment growth changes as issue for study, 26, 28
Employment growth predictors, 12-17
Entrepreneurship
as key to rural economic growth, 28-31, 51-52
and recruitment initiatives, 30, 31
support as state initiative, 79-80
Entrepreneurship-recruitment blends, 30, 31
Export programs, state initiatives, 55

F

Farm Belt
counties in study, 25-26
states in statistical model, 12
Federal aid to rural business, 77-78
Federal funding as statistical variable, 15-16
Federal institutions for rural development, 77
Federal-state relationship, restructuring, 77-79
Florida customized initiatives for rural industries, 60-61, 64
Forest City, Iowa, 31
Fort Scott, Kansas, 30

G

Geographic distribution of economic growth, 12
Government role in growth as issue for study, 26, 28
Grant programs as factor in growth, 40-41
Growth patterns of rural communities
model, 11-18
prediction, 7, 12-17
questions, 4
research, 9-11

H

High-growth county classification, 18-21
High growth industry, lack in rural areas, 3
High-skill industries. *See* High-technology industries
High-technology industries
lack in rural areas, 3
progressive firms, examples, 36-37
role in rural economic development, 36-37
Human skills, state programs for development, 55

I

Illinois Rural Affairs Council, 70
Industrial Development Authorities, 46
Industrial revenue bonds, 40
Inertia factor of growth, 17
Infrastructure
federal role, 77
key factor in rural economic growth, 42-43
Institution building as factor in development, 11
Iowa initiatives in regional approach to growth, 69

K

Kellogg Foundation, 64-65
Kentucky customized initiatives for rural development, 64

L

Leadership development
examples, 44, 45, 64, 65, 66
key factor in rural economic growth, 43-48
state initiative, 59-60, 64-66

Lebanon, Missouri, 30
Local economic development, 37
Location as statistical variable, 15, 22

M

Macroeconomic influences, 21
Manufacturing
  employment changes in rural areas, 2
  role in rural economic growth, 31-36
Maryland customized initiatives for rural development, 62
Maryland Rural Development Program, 69-70
Massachusetts customized initiatives for rural industries, 60
Mexico, Missouri, 42
Mining industry assistance by states, 61
Minneapolis, Kansas, 31
Minnesota initiatives in economic development, 57-58, 61
Minnesota legislation for community development, 66
Minnesota Rural Development Board, 70
Missouri Community Betterment program, 65
Missouri Cooperative Extension Service, 50
Model. *See* Statistical model of rural economic change
Monett, Missouri, 30, 41
Montana customized initiatives for rural development, 61

N

New York State
  regional initiatives, 69
  rural industries, 60
  state rural office, 69
North Dakota customized initiatives for rural development, 63

O

Ohio customized initiatives for rural development, 61, 62, 64
Oklahoma
  development investment initiatives, 57
  regional approach, 68
Oregon initiatives for regional approach, 68
Organizational structures
  regional institutions, 67-69
  rural economic development, 46-48, 66-70
  state rural offices, 69-70
Osceola, Iowa, leadership, 44

P

Partnerships. *See* Leadership development
Pennsylvania
  regional approach initiatives, 68-69
  rural development, 61, 62, 64
Pennsylvania Renaissance Communities Program, 65-66
Peru, Nebraska, 45
Population as statistical variable, 14
Price supports, role in farm income, 77
Prosperity factors, 2
Public-private partnerships, 76-77

R

Recreation and retirement centers, 36
Recruitment as key to growth, 28-31, 38, 51, 55
Regional economic development efforts, 67-69
Research directions, 80-81
Resource availability increases as factor in rural development, 9
Risk-taking as development factor, 37-38, 51

Rural economic development
bankers' role, 44
branch plant role, 28-29
education and, 3, 45
established local business role, 29-30, 39
financial tools for, 40-41
geographic relationships and, 9, 11
high-technology industries and, 36-37
industrial revenue bonds for, 40
infrastructure as factor in, 42-43
leadership development and, 43-48
market expansion in, 9, 11
progressive firms as factor in, 36-37
pro-growth attitude and, 37-39
service industries and, 3, 31-36
troubleshooting in, 39
Rural emigration, 1, 3
Rural income fluctuations, 1-2
Rural industries as focus of state support, 59
customized initiatives, 60-62

S

Science and technology, state programs, 55
Selection of high-growth communities for study, 25-28
Service industries, 3, 31-36
Sites and building, 41-42
Southern states' rural economy, 14
Sparkplug type of leadership. *See* Leadership development
Start-ups, role in rural economic development, 28-29
State and federal agencies for economic growth, 48, 50
State economy as factor in statistical model, 17
State emergency assistance measures for rural economic distress, 53-54
State financing programs, 63-64
State services, duplication and fragmentation, 66-67
State support for rural economic development, 4, 53-71
background, 53-54
business climate, 56-57
customized initiatives, 58-66
economic development programs, 55
industrial recruitment, 55
organizational structures, 66-70
skills development programs, 59
small and new business programs, 55
strategy building, 54-58
Statistical model of rural economic change, 11-18
design, 12, 21
predictive power, 17-18
use, 11-12
variables, 12-17
Strategies for rural economic growth, 25-51
finance, sites and buildings, and infrastructure, 40-43
leadership, partnerships, and sparkplugs, 40-43
manufacturing and service industries, 31-36
outside support, 48-50
progressive firms, 36-37
pro-growth attitude, 37-39
recruitment and entrepreneurship, 28-31
sustained local economic development activities, 37
Strategies for state economic development, 54-58, 73-82
adaptability to change, 73-74
catalyzing of institutional change, 74
community-led initiatives, 75-76
entrepreneurship support, 79-80
federal-state relationships, 77-79
public-private partnerships, 76-77
research directions, 80-81
Study design, 25
Success characteristics for rural areas, 4

T

Tax incentives as factor in rural economic growth, 41
Technology advances as development factor, 9
Timber industry assistance by states, 61-62
Top-of-cycle firms, 3, 5
Tourism development by states, 62

U

University of Wisconsin Extension Community Preparedness Program, 65
Urban Development Action Grants (UDAG), 40-41, 42

V

Valley City, North Dakota, 31
Variables used in statistical model, 12-17
Venture capital lack in rural areas, 3
Vermont, Oregon, customized initiatives for rural industries, 60
Virginia initiatives in regional approach, 69

W

Washington State initiatives for rural development, 64
West Virginia initiatives for rural development, 61
Winnebago County, Iowa, 48, 50
Work ethic, 43

Z

Zero-sum recruitment, 55

About the Authors

DeWitt John is the director of the Trade and Development Program at the National Governors' Association Center for Policy Research. He is the author of *Shifting Responsibilities: Federalism in Economic Development*. He has worked for the states of Massachusetts and Colorado, most recently serving as director of the Colorado Governor's Office of Policy and Research.

Sandra Batie is Professor of Agricultural Economics at Virginia Polytechnic Institute and State University. In 1986-87, she was a senior fellow at the NGA Center for Policy Research. She has written extensively on natural resource and rural development policy and is the 1987-88 president of the Southern Agricultural Economics Association.

Kim Norris was a consultant to NGA for this project. Prior to working for NGA, she was an assistant economist with the Federal Reserve Bank of Kansas City. She is currently a staff research associate with the Cooperative Extension Service at the University of California at Davis.